Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O01R-01-BAC** **South Fork Holston River and Tributaries**

Cause Location: This segment includes the mainstem South Fork Holston River from the headwaters downstream to the Barton Creek confluence; from the Rowland Creek confluence downstream to the Grosses Creek confluence; and the Lower South Fork Holston River from the South Holston Lake backwaters upstream to the Rush Creek confluence. It also includes Bishop Branch from the confluence with South Fork Holston River upstream to the confluence with Parker Branch, Grosses Creek from the headwaters downstream to the confluence with South Fork Holston River, Slemp Creek from the headwaters downstream to the confluence with the South Fork Holston River, and St. Clair Creek, a South Fork Holston River tributary south of St. Clair Bottom.

City / County: Smyth Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6CSFH075.61 had a 21% exceedance of the E.coli water quality standard, 6CSFH110.45 had a 33% exceedance, 6CSFH097.42 had a 25% exceedance of the E. coli water quality standard. Station 6CGRC000.68 had a 67% exceedance of the E. coli water quality standard, station 6CBSC000.10 had a 91% exceedance, station 6CSLM000.67 had a 40% exceedance, and station 6BSTC000.20 had a 25% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O01R_BSC01A02 / Bishop Branch / South Fork Holston tributary from south at Riverside in WQS Section 6.	4A	Escherichia coli	2010	L	0.48
VAS-O01R_GRC01A00 / Grosses Creek / From the headwaters downstream to the South Fork Holston River confluence, southeast of Loves Mill, WQS Section 6, DGIF vi.	4A	Escherichia coli	2010	L	4.00
VAS-O01R_SFH01A00 / South Fork Holston River / Mainstem South Fork Holston River from Rowland Creek confluence downstream to Grosses Creek confluence, WQS Section 6.	4A	Escherichia coli	2002	L	8.73
VAS-O01R_SFH03A00 / South Fork Holston River / Mainstem South Fork Holston River from headwaters downstream to Barton Branch confluence, WQS Section 6, DGIF ii.	4A	Escherichia coli	2010	L	9.58
VAS-O01R_SLM01A02 / Slemp Creek / Upper Slemp Creek, north of Sugar Grove in WQS Section 6.	4A	Escherichia coli	2010	L	3.85
VAS-O01R_STC01A02 / Saint Clair Creek / A South Fork Holston tributary south of St. Clair Bottom, in WQS Section 6.	4A	Escherichia coli	2016	L	3.68
VAS-O02R_SFH02A00 / South Fork Holston River / Lower South Fork Holston River from Rockhouse Run confluence at South Holston Lake backwaters, river mile 73.00, upstream to the Rush Creek confluence, WQS Section 6.	4A	Escherichia coli	2004	L	12.98

South Fork Holston River and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**43.30**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O01R_SFH03A00 / South Fork Holston River / Mainstem South Fork Holston River from headwaters downstream to Barton Branch confluence, WQS Section 6, DGIF ii.	4A	Fecal Coliform	2004	L	9.58

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

South Fork Holston River and Tributaries

Recreation

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**9.58**

Sources:

- Grazing in Riparian or Shoreline Zones
- Livestock (Grazing or Feeding Operations)
- Rural (Residential Areas)
- Source Unknown
- Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O01R-02-PH** **Hurricane Creek Tributary**

Cause Location: This is an unnamed tributary of Hurricane Creek in Smyth County north of the Appalachian Trail.

City / County: Smyth Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5A

pH measurements at station 6CXEE000.72 failed to meet the pH water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O01R_XEE01A08 / Hurricane Creek tributary / On Hurricane Mountain, WQS Section 6, DGIF ii.	5A	pH	2010	L	1.12

Hurricane Creek Tributary	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			**1.12**

Sources:

Natural Sources

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O02R-01-HG** **South Fork Holston River**

Cause Location: This segment extends from the Grosses Creek confluence downstream to Rush Creek.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Two samples at station 6CSFH0088.91 exceeded the Mercury screening values in 2007.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O02R_SFH01B02 / South Fork Holston River / South Fork Holston River from Grosses Creek confluence south of Loves Mill. downstream to Rush Creek confluence, WQS Section 6.	5A	Mercury in Fish Tissue	2010	L	6.14

South Fork Holston River **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:			**6.14**

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O02R-03-HG** **Beaverdam Creek**

Cause Location: This segment extends from the Tennessee state line upstream to its confluence with the South Fork Holston River.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

The Virginia Department of Health's level of concern was exceeded for Mercury in one fish tissue sample and the Department of Environmental Quality's screening value for Mercury was exceeded in an additional sample.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O02R_BVD01A00 / Beaverdam Creek / Beaverdam Creek mainstem from Tennessee line upstream to its confluence with South Fork Holston River in Damascus, WQS Section 6, DGIF iii.	5A	Mercury in Fish Tissue	2010	L	2.01

Beaverdam Creek **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:			**2.01**

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O02R-05-BAC** **Whitetop Laurel Creek**

Cause Location: Mainstem from Pennington Branch confluence upstream of Konnarock, downstream to the Green Cove Creek confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6CWLC011.55 had a 16% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O02R_WLC01A00 / Whitetop Laurel Creek / South of Straight Mountain, the mainstem from Little Laurel Creek confluence upstream of Konnarock, downstream to the Green Cove Creek confluence. Section 6, DGIF ii.	5A	Escherichia coli	2012	M	3.80

Whitetop Laurel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**3.80**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O03R-01-BAC** **Middle Fork Holston River**

Cause Location: This segment extends from the headwaters downstream to Chilhowie and includes from the Button Branch confluence at Groseclose downstream to the Snavely Branch confluence.

City / County: Smyth Co. Washington Co. Wythe Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station, 6CMFH053.36 had a 31% exceedance of the E. coli water quality standard, 6CMFH045.83, had a 22% exceedance and an additional station at 6CMFH040.67 had a 58% exceedance. Station 6CMFH033.40 had a 52% exceedance and 6CMFH013.21 had a 30% exceedance. Station 6CMFH055.88 had a 66% exceedance and station 6CXDY000.17 had a 66% exceedance. VAS-O05R_MFH03A00 was delisted in 2012 and relisted in 2014.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O03R_MFH01A00 / Middle Fork Holston River / From Marion raw water intake, near Mt Carmel, downstream to Hungry Mother Creek confluence, including Town of Marion, section 5.	4A	Escherichia coli	2010	M	5.50
VAS-O03R_MFH02A00 / Middle Fork Holston River / From Marion raw water intake, 45.83, through Atkins to the Snavely Branch confluence, WQS Section 5c, DGIF vi.	4A	Escherichia coli	2010	M	5.15
VAS-O03R_MFH04A98 / Middle Fork Holston River / From Dutton Branch confluence at Groseclose downstream to the at the Snavely Branch confluence, WQS Section 5, DGIF vi.	4A	Escherichia coli	2014	M	4.25
VAS-O03R_MFH05A04 / Middle Fork Holston River / Mainstem headwaters upstream of Dutton Branch confluence at Groseclose, WQS Section 5, DGIF vi; originates in Kinser Valley in Wythe County.	4A	Escherichia coli	2010	M	3.42
VAS-O04R_MFH01A00 / Middle Fork Holston River / Mainstem Middle Fork Holston River from Hungry Mother Creek confluence downstream to Sulfur Spring Creek confluence, section 5.	4A	Escherichia coli	2004	M	12.59
VAS-O05R_MFH03A00 / Middle Fork Holston River / Mainstem Middle Fork Holston River from PWS segment upstream to Edmondson Dam, WQS Section 5.	4A	Escherichia coli	2006	M	3.87
VAS-O05R_XDY01A08 / Middle Fork Holston tributary / Enters at SR 803 crossing near the USGS gauging station, WQS Section 5.	4A	Escherichia coli	2008	M	0.88

Middle Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**35.66**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O03R_MFH01A00 / Middle Fork Holston River / From Marion raw water intake, near Mt Carmel, downstream to Hungry Mother Creek confluence, including Town of Marion, section 5.	4A	Fecal Coliform	2002	M	5.50
VAS-O03R_MFH02A00 / Middle Fork Holston River / From Marion raw water intake, 45.83, through Atkins to the Snavely Branch confluence, WQS Section 5c, DGIF vi.	4A	Fecal Coliform	2002	M	5.15
VAS-O03R_MFH04A98 / Middle Fork Holston River / From Dutton Branch confluence at Groseclose downstream to the at the Snavely	4A	Fecal Coliform	2002	M	4.25

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

Branch confluence, WQS Section 5, DGIF vi.

VAS-O05R_MFH04A00 / Middle Fork Holston River / Mainstem Middle Fork Holston River from Sulphur Spring Creek downstream to Rt. 91 bridge, WQS Section 5.	4A	Fecal Coliform	2002	M	9.19
VAS-O05R_MFH05A04 / Middle Fork Holston River / Mainstem Middle Fork Holston River from Edmondson Dam upstream to Rt. 91 bridge, downstream to Rt. 91 bridge confluence, WQS Section 5a.	4A	Fecal Coliform	2006	M	3.80

Middle Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**27.89**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O03R-01-BEN** **Middle Fork Holston River**

Cause Location: This segment includes the Middle Fork Holston River from the headwaters downstream to the Dutton Branch confluence.

City / County: Smyth Co. Wythe Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Probabilistic Monitoring station 6CMFH055.88 was impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O03R_MFH05A04 / Middle Fork Holston River / Mainstem headwaters upstream of Dutton Branch confluence at Groseclose, WQS Section 5, DGIF vi; originates in Kinser Valley in Wythe County.	5A	Benthic-Macroinvertebrate Bioassessments	2010	M	3.42

Middle Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.42**

Sources:

Grazing in Riparian or Shoreline Zones	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O03R-02-BAC** **Bear Creek**

Cause Location: Middle Fork Holston River tributary, west of Atkins, parallel to Route 622.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

AWQM station at 6CBER000.17 had a 33% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O03R_BER01A02 / Bear Creek & tributaries / Middle Fork Holston River tributary flows south, west of Atkins, WQS Section 5c.	5A	Escherichia coli	2010	M	6.51

Bear Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**6.51**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O03R-03-BAC** **Staley Creek**

Cause Location: This segment is a Middle Fork Holston River tributary, parallel to Route 16, south of Marion to the National Forest border.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

AWQM station at 6CSTA000.05 has a 63% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O03R_STA01A02 / Staley Creek / Middle Fork Holston River tributary from I 81 upstream to National Forest just north of Rocky Hollow, including east Currin Valley, WQS Section 5, DGIF vi.	5A	Escherichia coli	2010	M	5.58
VAS-O03R_STA01B10 / Staley Creek / Middle Fork Holston River tributary on the west side of Marion, upstream to I 81, WQS Section 5, DGIF vi.	5A	Escherichia coli	2010	M	1.01

Staley Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**6.59**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O04L-01-HG** **Hungry Mother Lake**

Cause Location: This segment includes Hungry Mother Lake from its headwaters to the dam.

City / County: Smyth Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Mercury exceeded DEQ's screening value in four fish samples at station 6CHUN005.24

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O04L_HUN01A02 / Hungry Mother Lake / Man made reservoir in Hungry Mother State Park in Smyth County, WQS Section 5b.	5A	Mercury in Fish Tissue	2010	L	103.23

Hungry Mother Lake **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**103.23**	

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O04R-01-BAC** **Hungry Mother Creek**

Cause Location: This segment extends from the reservoir downstream to the Middle Fork Holston River confluence.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

Station 6CHUN001.34 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O04R_HUN02A02 / Hungry Mother Creek / Hungry Mother Creek downstream from dam to Middle Fork Holston River west of Marion, WQS Section 5.	4A	Escherichia coli	2006	M	4.83

Hungry Mother Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.83**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O04R-03-BAC** **Laurel Springs Creek**

Cause Location: This segment flows north from Adwolf to the Middle Fork Holston River.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station, 6CLRL000.35, had a 50% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O04R_LRL01A04 / Laurel Springs Creek / Flows north from Adwolf to Middle Fork Holston River, WQS Section 5.	4A	Escherichia coli	2006	M	2.12

Laurel Springs Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**2.12**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O04R-04-BAC** **Walker Creek**

Cause Location: This segment flows from the headwaters downstream to the Middle Fork Holston River near the intersection of route 659 and route 645.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station, 6CWAL000.09, had a 66% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O04R_WAL01A02 / Walker Creek & tributaries / A Middle Fork Holston River tributary from north of Little Brushy Mountain, WQS Section 5.	4A	Escherichia coli	2006	M	13.52

Walker Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**13.52**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O04R-05-BAC** **Sulphur Spring Branch and Tributaries**

Cause Location: This segment is a Middle Fork Holston River tributary north of Chilhowie that runs parallel to Route 107 to the intersection with Route 617.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CSUL000.09 has a 75% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O04R_SUL01A12 / Sulphur Spring Creek and tributaries / Middle Fork Holston River tributary that drains Lyons Gap area of Little Brushy Mountain northwest of Chilhowie.	4A	Escherichia coli	2012	M	11.28

Sulphur Spring Branch and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**11.28**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O05R-01-BAC** **Three Creeks**

Cause Location: This segment includes the following tributaries to Middle Fork Holston River: Hutton, Hall, Byers, and their tributaries (Cedar Creek, West Fork Cedar Creek, East Fork Cedar Creek, Plum Creek, unnamed tributary to Hutton Creek, unnamed tributary to Hall Creek and Tattle Branch).

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

Station 6CBYS000.23 had a 50% exceedance of the E.coli water quality standard and station 6CCED000.14 had a 83% exceedance of the E.coli standard. An additional station at 6CXDY000.17 had a 66% exceedance of the E. coli water quality standard. Station 6CHTO000.24 had an 91% exceedance of the E. coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_BYS01A94 / Byers Creek / Byers Creek from Hall Creek and Indian Run confluence downstream to Middle Fork Holston River confluence, WQS Section 5.	4A	Escherichia coli	1996	H, 2yr	0.49
VAS-O05R_CED01A94 / Cedar Creek / From confluence of East Fork Cedar Creek and West Fork Cedar Creek through Cedarville to Middle Fork Holston confluence, WQS Section 5.	4A	Escherichia coli	2006	H, 2yr	5.61
VAS-O05R_HTO01A94 / Hutton Creek / Headwaters east of Glade Spring downstream to Middle Fork Holston River confluence and tributaries, WQS Section 5.	4A	Escherichia coli	2006	H, 2yr	5.15

Three Creeks **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**11.25**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_CWF01A02 / West Fork Cedar Creek / Cedar Creek tributary west of Meadowview, section 5.	4A	Fecal Coliform	2002	H, 2yr	1.54
VAS-O05R_ECE01A02 / Cedar Creek / Cedar Creek tributary through Meadowview, section 5.	4A	Fecal Coliform	2002	H, 2yr	1.10
VAS-O05R_HAL01A94 / Hall Creek / Mainstem from headwaters north of Emory through Emory and Henry College to Byers Creek confluence, WQS Section 5.	4A	Fecal Coliform	2002	H, 2yr	6.91
VAS-O05R_PLU01A02 / Plum Creek / Headwaters at Jamison Gap downstream to Hutton Creek confluence, WQS Section 5.	4A	Fecal Coliform	2002	H, 2yr	2.32
VAS-O05R_TAT01A02 / Tattle Branch / Mainstem south of Old Glade Spring from headwaters to Byers Creek confluence, WQS Section 5.	4A	Fecal Coliform	2002	H, 2yr	2.77
VAS-O05R_XCD01A02 / Tributary to Hutton Creek / Headwaters near Litz through Glade Spring down to Middle Fork Holston River confluence and tributaries, WQS Section 5.	4A	Fecal Coliform	2002	H, 2yr	4.11
VAS-O05R_XCG01A02 / Hall Creek tributary / Mainstem from headwaters to Hall Creek confluence west of Patrick Henry High School, section 5.	4A	Fecal Coliform	2002	H, 2yr	1.71

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

Three Creeks	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**20.46**

Sources:

- Animal Feeding Operations (NPS)
- Crop Production (Crop Land or Dry Land)
- Grazing in Riparian or Shoreline Zones
- Livestock (Grazing or Feeding Operations)
- Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O05R-01-BEN** **Three Creeks**

Cause Location: This segment includes the following tributaries to Middle Fork Holston River: Hall and surrounding tributaries (Byers Creek, Cedar Creek, West Fork Cedar Creek, East Fork Cedar Creek, Plum Creek, unnamed tributary to Hutton Creek, unnamed tributary to Hall Creek, Tattle Branch).

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

The following biological stations were found to be impaired based on their VSCI scores being lower than 60: 6CTAT000.50, 6CCED000.04, and 6CBYS000.08.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_BYS01A94 / Byers Creek / Byers Creek from Hall Creek and Indian Run confluence downstream to Middle Fork Holston River confluence, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	0.49
VAS-O05R_CED01A94 / Cedar Creek / From confluence of East Fork Cedar Creek and West Fork Cedar Creek through Cedarville to Middle Fork Holston confluence, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	5.61
VAS-O05R_CWF01A02 / West Fork Cedar Creek / Cedar Creek tributary west of Meadowview, section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	1.54
VAS-O05R_ECE01A02 / Cedar Creek / Cedar Creek tributary through Meadowview, section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	1.10
VAS-O05R_HAL01A94 / Hall Creek / Mainstem from headwaters north of Emory through Emory and Henry College to Byers Creek confluence, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	6.91
VAS-O05R_PLU01A02 / Plum Creek / Headwaters at Jamison Gap downstream to Hutton Creek confluence, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	2.32
VAS-O05R_TAT01A02 / Tattle Branch / Mainstem south of Old Glade Spring from headwaters to Byers Creek confluence, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	2.77
VAS-O05R_XCD01A02 / Tributary to Hutton Creek / Headwaters near Litz through Glade Spring down to Middle Fork Holston River confluence and tributaries, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	4.11
VAS-O05R_XCG01A02 / Hall Creek tributary / Mainstem from headwaters to Hall Creek confluence west of Patrick Henry High School, section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2004	H, 2yr	1.71

Three Creeks **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**26.56**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_CED01A94 / Cedar Creek / From confluence of East Fork Cedar Creek and West Fork Cedar Creek through Cedarville to Middle Fork Holston confluence, WQS Section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	5.61
VAS-O05R_CWF01A02 / West Fork Cedar Creek / Cedar Creek tributary west of Meadowview, section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	1.54

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

VAS-O05R_ECE01A02 / Cedar Creek / Cedar Creek tributary through Meadowview, section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	1.10
VAS-O05R_HAL01A94 / Hall Creek / Mainstem from headwaters north of Emory through Emory and Henry College to Byers Creek confluence, WQS Section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	6.91
VAS-O05R_TAT01A02 / Tattle Branch / Mainstem south of Old Glade Spring from headwaters to Byers Creek confluence, WQS Section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	2.77
VAS-O05R_XCD01A02 / Tributary to Hutton Creek / Headwaters near Litz through Glade Spring down to Middle Fork Holston River confluence and tributaries, WQS Section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	4.11
VAS-O05R_XCG01A02 / Hall Creek tributary / Mainstem from headwaters to Hall Creek confluence west of Patrick Henry High School, section 5.	4A	Sedimentation/Siltation	2010	H, 2yr	1.71

Three Creeks **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Sedimentation/Siltation - Total Impaired Size by Water Type:			**23.75**

Sources:

- Animal Feeding Operations (NPS)
- Crop Production (Crop Land or Dry Land)
- Grazing in Riparian or Shoreline Zones
- Livestock (Grazing or Feeding Operations)
- Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O05R-02-BAC** **Greenway Creek**

Cause Location: This segment includes the mainstem from the headwaters downstream to the confluence with the Middle Fork Holston River.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station 6CGRW000.09 had a 83% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_GRW01A02 / Greenway Creek / Tributary to Middle Fork Holston River at Neff, west of Meadowview.	4A	Escherichia coli	2008	H	5.02

Greenway Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**5.02**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O05R-02-BEN** **Greenway Creek**

Cause Location: This segment includes the mainstem from the headwaters downstream to the confluence with the Middle Fork Holston River.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6CGRW002.31 was impaired based on VSCI score of 55.80.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_GRW01A02 / Greenway Creek / Tributary to Middle Fork Holston River at Neff, west of Meadowview.	5A	Benthic-Macroinvertebrate Bioassessments	2010	H	5.02

Greenway Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**5.02**

Sources:

Grazing in Riparian or Shoreline Zones	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O05R-05-BEN** **Middle Fork Holston River**

Cause Location: This segment includes the mainstem Middle Fork Holston River from the Sulphur Springs Creek confluence to Edmondson Dam.

City / County: Smyth Co. Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Biological stations, 6CMFH011.31 and 6CMFH023.41 were impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O05R_MFH04A00 / Middle Fork Holston River / Mainstem Middle Fork Holston River from Sulphur Spring Creek downstream to Rt. 91 bridge, WQS Section 5.	4A	Benthic-Macroinvertebrate Bioassessments	2008	L	9.19
VAS-O05R_MFH05A04 / Middle Fork Holston River / Mainstem Middle Fork Holston River from Edmondson Dam upstream to Rt. 91 bridge, downstream to Rt. 91 bridge confluence, WQS Section 5a.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	3.80

Middle Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**12.99**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06L-01-HG** **South Holston Reservoir**

Cause Location: The TVA dam is located in Tennessee and Virginia. It is operated to generate hydroelectric power, flood control and provide recreational opportunities.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Four fish tissue samples exceeded the Virginia Department of Health's level of concern for Mercury and 7 samples exceeded the Department of Environmental Quality's screening value for Mercury.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06L_SFH01A00 / South Holston Reservoir / The TVA dam is located in Tennessee; the 7580 acre reservoir is owned and operated by the Tennessee Valley Authority to generate hydroelectric power, flood control and provide recreational opportunities, WQS Section 2. Acreage given is Virginia only.	5A	Mercury in Fish Tissue	2010	L	######

South Holston Reservoir **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**1,699.97**	

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06L-01-PCB** **South Holston Reservoir**

Cause Location: The TVA dam is located in Tennessee and Virginia. It is operated to generate hydroelectric power, flood control and provide recreational opportunities.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

Two fish tissue samples from channel catfish exceeded the Department of Environmental Quality's screening value for polychlorinated biphenyls (PCBs).

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06L_SFH01A00 / South Holston Reservoir / The TVA dam is located in Tennessee; the 7580 acre reservoir is owned and operated by the Tennessee Valley Authority to generate hydroelectric power, flood control and provide recreational opportunities, WQS Section 2. Acreage given is Virginia only.	5A	PCB in Fish Tissue	2010	L	######

South Holston Reservoir **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:		**1,699.97**	

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-01-BAC** **Wolf Creek**

Cause Location: This segment extends from the upper mainstem at Route 11 downstream to the lake backwaters and also includes the lower mainstem from the Town Creek confluence through the Great Knobs, downstream to the Route 75 bridge. Spoon Gap Creek, a Wolf Creek tributary near Green Spring.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station, 6CWLF001.18, had a 66% exceedance of the E.coli water quality standard, 6CWLF004.10 had a 25% exceedance, and station 6CWLF007.55 had a 55% exceedance of the E.coli water quality standard. Station 6CSPO001.45 had a 16% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_SPO01A16 / Spoon Gap Creek / A Wolf Creek tributary near Green Spring, Section 3.	4A	Escherichia coli	2016	M	2.66
VAS-O06R_WLF01A98 / Wolf Creek / Lower mainstem from Town Creek confluence through the Great Knobs, downstream to Rt. 75 bridge, WQS Section 3.	4A	Escherichia coli	2008	M	3.33
VAS-O06R_WLF02B06 / Wolf Creek / Lower end of Wolf Creek from Rt. 75 bridge near Green Spring downstream to South Holston Lake backwaters.	4A	Escherichia coli	2010	M	0.41
VAS-O06R_WLF02B08 / Wolf Creek / Upper mainstem from the Town Creek confluence past Stone Mill, upstream to Rt. 11 in west Abingdon.	4A	Escherichia coli	2010	M	2.36
VAS-O06R_WLF03A06 / Wolf Creek / From upper Rt. 75 bridge near Abingdon downstream to Rt. 75 bridge near Green Spring, WQS Section 3.	4A	Escherichia coli	2010	M	2.93

Wolf Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**11.69**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_WLF01A98 / Wolf Creek / Lower mainstem from Town Creek confluence through the Great Knobs, downstream to Rt. 75 bridge, WQS Section 3.	4A	Fecal Coliform	2004	M	3.33
VAS-O06R_WLF02B06 / Wolf Creek / Lower end of Wolf Creek from Rt. 75 bridge near Green Spring downstream to South Holston Lake backwaters.	4A	Fecal Coliform	2006	M	0.41
VAS-O06R_WLF03A06 / Wolf Creek / From upper Rt. 75 bridge near Abingdon downstream to Rt. 75 bridge near Green Spring, WQS Section 3.	4A	Fecal Coliform	2004	M	2.93

Wolf Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**6.67**

Fact Sheets for
Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

Sources:

Livestock (Grazing or Feeding Operations)	Rural (Residential Areas)	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-01-BEN** **Wolf Creek**

Cause Location: This segment extends from the Town Creek confluence downstream to the lake backwaters.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

The biological stations located at 6CWLF004.10, 6CWFC005.95 and 6CWLF006.43 are impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_WLF01A98 / Wolf Creek / Lower mainstem from Town Creek confluence through the Great Knobs, downstream to Rt. 75 bridge, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2002	M	3.33
VAS-O06R_WLF02B06 / Wolf Creek / Lower end of Wolf Creek from Rt. 75 bridge near Green Spring downstream to South Holston Lake backwaters.	4A	Benthic-Macroinvertebrate Bioassessments	2006	M	0.41
VAS-O06R_WLF03A06 / Wolf Creek / From upper Rt. 75 bridge near Abingdon downstream to Rt. 75 bridge near Green Spring, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2006	M	2.93

Wolf Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**6.67**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_WLF02B06 / Wolf Creek / Lower end of Wolf Creek from Rt. 75 bridge near Green Spring downstream to South Holston Lake backwaters.	4A	Sedimentation/Siltation	2012	M	0.41
VAS-O06R_WLF03A06 / Wolf Creek / From upper Rt. 75 bridge near Abingdon downstream to Rt. 75 bridge near Green Spring, WQS Section 3.	4A	Sedimentation/Siltation	2012	M	2.93

Wolf Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**3.34**

Sources:

Grazing in Riparian or Shoreline Zones	Rural (Residential Areas)	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-01-PCB** **Wolf Creek**

Cause Location: This segment extends from the Town Creek confluence downstream to the lake backwaters.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

This segment was listed based on the Virginia Department of Health's fish consumption advisory for polychlorinated biphenyls.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_WLF01A98 / Wolf Creek / Lower mainstem from Town Creek confluence through the Great Knobs, downstream to Rt. 75 bridge, WQS Section 3.	5A	PCB in Fish Tissue	2006	L	3.33
VAS-O06R_WLF02B06 / Wolf Creek / Lower end of Wolf Creek from Rt. 75 bridge near Green Spring downstream to South Holston Lake backwaters.	5A	PCB in Fish Tissue	2006	L	0.41
VAS-O06R_WLF03A06 / Wolf Creek / From upper Rt. 75 bridge near Abingdon downstream to Rt. 75 bridge near Green Spring, WQS Section 3.	5A	PCB in Fish Tissue	2006	L	2.93

Wolf Creek **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:			**6.67**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-02-BAC** **Fifteen Mile Creek**

Cause Location: This segment extends from the headwaters downstream to the confluence with the South Holston Reservoir.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

Station 6CFIF000.96 had a 45% exceedance of the E.coli water quality standard and station 6CFIF006.16 had a 40% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_FIF01A02 / Fifteenmile Creek & tributaries / From north of Watauga Road to South Holston Lake backwaters, WQS Section 3.	5A	Escherichia coli	2008	M	8.99
VAS-O06R_FIF02A08 / Fifteenmile Creek / From Lee Highway near I81 Exit 19, to beginning of PWS waters just north of Watauga Road, WQS Section 3.	5A	Escherichia coli	2008	M	3.94

Fifteen Mile Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**12.93**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-03-BAC** **Spring Creek**

Cause Location: This segment extends from the South Holston Reservoir backwaters upstream to the headwaters.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6CSPR001.18 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_SPR01A02 / Spring Creek / Spring Creek from South Holston Lake backwaters upstream, WQS Section 3, DGIF vi.	5A	Escherichia coli	2008	M	4.43

Spring Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**4.43**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-04-BAC** **Town Creek**

Cause Location: This segment includes the mainstem from the headwaters, through the Town of Abingdon to the Wolf Creek confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CTOW000.58 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_TOW01A00 / Town Creek / Mainstem from the headwaters, flows from northeast through Town of Abingdon, southwest to the Wolf Creek confluence, WQS Section 3.	4A	Escherichia coli	2012	L	4.75

Town Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**4.75**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O06R-06-BAC** **Cox Mill Creek**

Cause Location: A South Holston Lake tributary.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

DEQ special study monitoring station located at 6CMLC000.65 had a 33% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O06R_CXC01A18 / Cox Mill Creek / South Holston Lake tributary, WQS Section 3.	5A	Escherichia coli	2018	L	3.51

Cox Mill Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**3.51**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O07R-01-BAC** **Beaver Creek and Tributaries**

Cause Location: This segment includes the headwaters of Beaver Creek downstream to the Tennessee political boundary. It also includes the headwaters of Little Creek, including Mumpower Creek, downstream to the Tennessee political boundary in the City of Bristol.

City / County: Bristol City Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM and TMDL stations revealed a 50% exceedance of the E.coli water quality standard at 6CBEV015.27, a 54% exceedance at 6CMUM000.65, a 100% exceedance at 6CXDR000.34 and a 91% exceedance at 6CLTL000.26.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_BEV01A94 / Beaver Creek / Mainstem from Beaver Creek dam (nonfunctional) thru the City of Bristol, downstream to Tennessee state line including tributaries, Section 4.	4A	Escherichia coli	2006	L	7.27
VAS-O07R_BEV02A94 / Beaver Creek / From headwaters of Beaver Creek near Ratcliff Knob downstream to Beaver Creek flood control dam in Sugar Hollow Park, section 4, DGIF vi.	4A	Escherichia coli	2006	L	7.77
VAS-O07R_LTL01A96 / Little Creek / Headwaters, downstream to the Tennessee state line in the City of Bristol, WQS Section 4.	4A	Escherichia coli	2006	L	2.29
VAS-O07R_MUM01A06 / Mumpower Creek / A tributary to Little Creek parallel SR 640, north of Bristol City limits, WQS Section 4.	4A	Escherichia coli	2006	L	2.90
VAS-O07R_XDR01A06 / Little Creek / Headwaters west of Haskell, downstream to the confluence of Mumpower Creek parallel to Campground Road in WQS Section 4.	4A	Escherichia coli	2006	L	2.80

Beaver Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**23.03**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_LTL01A96 / Little Creek / Headwaters, downstream to the Tennessee state line in the City of Bristol, WQS Section 4.	4A	Fecal Coliform	2004	L	2.29

Beaver Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**2.29**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access Wastes from Pets

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O07R-01-BEN** **Beaver Creek**

Cause Location: This segment includes the mainstem from the headwaters of Beaver Creek downstream to the Tennessee political boundary including its tributaries.

City / County: Bristol City Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

The biological stations located at 6CBEV015.27 and 6CBEV023.99 was found to be impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_BEV01A94 / Beaver Creek / Mainstem from Beaver Creek dam (nonfunctional) thru the City of Bristol, downstream to Tennessee state line including tributaries, Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	1998	L	7.27
VAS-O07R_BEV02A94 / Beaver Creek / From headwaters of Beaver Creek near Ratcliff Knob downstream to Beaver Creek flood control dam in Sugar Hollow Park, section 4, DGIF vi.	4A	Benthic-Macroinvertebrate Bioassessments	1998	L	7.77

Beaver Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**15.04**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_BEV01A94 / Beaver Creek / Mainstem from Beaver Creek dam (nonfunctional) thru the City of Bristol, downstream to Tennessee state line including tributaries, Section 4.	4A	Sedimentation/Siltation	2010	L	7.27
VAS-O07R_BEV02A94 / Beaver Creek / From headwaters of Beaver Creek near Ratcliff Knob downstream to Beaver Creek flood control dam in Sugar Hollow Park, section 4, DGIF vi.	4A	Sedimentation/Siltation	2010	L	7.77

Beaver Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Sedimentation/Siltation - Total Impaired Size by Water Type:			**15.04**

Sources:

Crop Production (Crop Land or Dry Land)
Rural (Residential Areas)
Unrestricted Cattle Access
Urban Runoff/Storm Sewers

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O07R-01-PCB** **Beaver Creek and Little Creek**

Cause Location: This segment includes the headwaters of Beaver Creek downstream to the Tennessee political boundary and Little Creek from the headwaters downstream to the Tennessee political boundary in the City of Bristol.

City / County: Bristol City Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

Fish tissue stations (6CBEV015.27 and 6CLTL000.26) found polychlorinated biphenyls (PCB's) in carp and stonerollers above DEQ's screening value.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_BEV01A94 / Beaver Creek / Mainstem from Beaver Creek dam (nonfunctional) thru the City of Bristol, downstream to Tennessee state line including tributaries, Section 4.	5A	PCB in Fish Tissue	2006	L	7.27
VAS-O07R_BEV02A94 / Beaver Creek / From headwaters of Beaver Creek near Ratcliff Knob downstream to Beaver Creek flood control dam in Sugar Hollow Park, section 4, DGIF vi.	5A	PCB in Fish Tissue	2006	L	7.77
VAS-O07R_LTL01A96 / Little Creek / Headwaters, downstream to the Tennessee state line in the City of Bristol, WQS Section 4.	5A	PCB in Fish Tissue	2006	L	2.29

Beaver Creek and Little Creek **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:			**17.33**

Sources:

Inappropriate Waste Disposal

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O07R-04-BAC** **Sinking Creek**

Cause Location: This segment includes the headwaters downstream to the Tennessee state line, east of the City of Bristol.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6CSNK006.68 has a 41% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_SNK01A02 / Sinking Creek / Headwaters downstream to the Tennessee state line, east of City of Bristol, WQS Section 4, DGIF vi.	5A	Escherichia coli	2012	M	3.79

Sinking Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**3.79**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O07R-05-BAC** **Stoffel Creek**

Cause Location: This segment is located northwest of the City of Bristol, near the Three Springs community.

City / County: Bristol City Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6CSTO000.86 has a 25% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O07R_STO01A12 / Stoffel Creek & tributaries / Drains the Three Springs community, northwest of City of Bristol.	5A	Escherichia coli	2012	M	5.22

Stoffel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**5.22**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O08R-01-BAC** **Boozy Creek**

Cause Location: This is a South Fork Holston Lake tributary to Tennessee, parallel to Route 618.

City / County: Scott Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6CBOO002.71 has a 50% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O08R_BOO01A12 / Boozy Creek / South Fork Holston Lake tributary parallel to the Tennessee state line, from Anderson Cemetery downstream.	5A	Escherichia coli	2012	M	2.53

Boozy Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**2.53**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O09R-01-BAC** **Lick Creek**

Cause Location: This segment extends from the Lynn Camp confluence, river mile 4.31, downstream to the North Fork Holston River confluence.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CLIB000.08 had a 33% exceedance, station 6CLIB001.06 had a 25% exceedance, and station 6CLIB003.65 had a 16% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O09R_LIB01A02 / Lick Creek / From the Lynn Camp confluence at river mile 4.31, downstream to the North Fork Holston confluence, WQS Section 1.	4A	Escherichia coli	2006	L	5.73

Lick Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**5.73**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O09R-03-BAC** **North Fork Holston River**

Cause Location: This segment includes the mainstem from the headwaters downstream to the Crewey Branch confluence and the mainstem from the Lick Branch confluence downstream to the Lick Creek confluence.

City / County: Bland Co. Smyth Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6CNFH127.12 had a 58% exceedance, station 6CNFH113.36 had a 16% exceedance, and station 6CNFH124.62 had a 33% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O09R_NFH01A02 / North Fork Holston River / Mainstem from Lick Creek confluence downstream to Crewey Branch confluence, WQS Section 1.	4A	Escherichia coli	2010	L	13.77
VAS-O09R_NFH01B02 / North Fork Holston River / Mainstem from Lick Branch confluence near Bland/Wythe County line downstream to Lick Creek confluence, WQS Section 1.	4A	Escherichia coli	2014	L	12.58
VAS-O09R_NFH01C02 / North Fork Holston River / Mainstem from headwaters near Sharon Springs, downstream through Ceres, to Lick Branch confluence, WQS Section 1.	4A	Escherichia coli	2010	L	12.23

North Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**38.58**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O09R_NFH01C02 / North Fork Holston River / Mainstem from headwaters near Sharon Springs, downstream through Ceres, to Lick Branch confluence, WQS Section 1.	4A	Fecal Coliform	2006	L	12.23

North Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**12.23**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O10R-01-BAC** **North Fork Holston River**

Cause Location: This segment extends from the Laurel Creek confluence downstream to the confluence of Tumbling Creek. It also includes the mainstem from the confluence of Big Moccasin Creek downstream to the Tennessee line.

City / County: Scott Co. Smyth Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM station 6CNFH081.69 had a 20% exceedance, station 6CNFH085.20 had a 21% exceedance, station 6CNFH089.25 had a 16% exceedance, and station 6CNFH008.78 had an 11% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_NFH01A94 / North Fork Holston River / From Rt. 91 near Broady Bottom above Saltville to Robertson Branch confluence in WQS, WQS Section 1.	4A	Escherichia coli	2008	L	1.83
VAS-O10R_NFH02A00 / North Fork Holston River / From Laurel Creek confluence near Broadford, downstream Rt. 91 near Allison Gap, WQS Section 1.	4A	Escherichia coli	2006	L	8.51
VAS-O11R_NFH03A94 / North Fork Holston River / From confluence of Robertson Branch near Allison Gap, downstream to confluence of Tumbling Creek in WQS Section 1a.	4A	Escherichia coli	2006	L	4.92
VAS-O13R_NFH01A94 / North Fork Holston River / Mainstem from confluence of Big Moccasin Creek downstream to Tennessee state line, WQS Section 1a.	4A	Escherichia coli	2006	L	5.32

North Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**20.58**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_NFH01A94 / North Fork Holston River / From Rt. 91 near Broady Bottom above Saltville to Robertson Branch confluence in WQS, WQS Section 1.	4A	Fecal Coliform	2006	L	1.83
VAS-O13R_NFH01A94 / North Fork Holston River / Mainstem from confluence of Big Moccasin Creek downstream to Tennessee state line, WQS Section 1a.	4A	Fecal Coliform	2004	L	5.32

North Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**7.15**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O10R-01-HG** **North Fork Holston River**

Cause Location: This segment begins in Saltville at the Robertson Branch confluence and extends downstream to the Tennessee state line.

City / County: Scott Co. Smyth Co. Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 4A

Mercury (Hg) contamination of the fish tissue prior to 1972 led to a ban on fish consumption by the Virginia Department of Health. The ban extends downstream for 80.4 miles, through watersheds; VAS-O11R, VAS-O12R, and VAS-O13R. Station 6CNFH080.43 exceeded the screening value for Hg in the water column and 6CNFH039.18 exceeded the screening values for Hg in sediment and fish tissue.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_NFH01A94 / North Fork Holston River / From Rt. 91 near Broady Bottom above Saltville to Robertson Branch confluence in WQS, WQS Section 1.	4A	Mercury in Fish Tissue	1994	L	1.83
VAS-O11R_NFH01A00 / North Fork Holston River / Segment from Brumley Creek confluence downstream to Cabin Creek confluence, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	1.87
VAS-O11R_NFH02A94 / North Fork Holston River / From Route 80 crossing at River Bridge community downstream to Brumley Creek confluence, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	6.29
VAS-O11R_NFH02B10 / North Fork Holston River / From Tumbling Creek confluence downstream to Rt. 80 bridge crossing, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	8.52
VAS-O11R_NFH03A94 / North Fork Holston River / From confluence of Robertson Branch near Allison Gap, downstream to confluence of Tumbling Creek in WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	4.92
VAS-O12R_NFH01B02 / North Fork Holston River / Mainstem near Maces Spring from Livingston Creek confluence downstream to Cove Creek confluence, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	4.28
VAS-O12R_NFH01C02 / North Fork Holston River / Mainstem near Mendota from Abrams Creek confluence to Livingston Creek confluence, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	8.17
VAS-O12R_NFH02A00 / North Fork Holston River / Mainstem from Cabin Creek confluence near Mongle Spring to Little Moccasin Creek confluence at Holston community, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	2.84
VAS-O12R_NFH02C04 / North Fork Holston River / Mainstem near Walnut Grove, from Smith Creek confluence at Horseshoe Bend, downstream to Abrams Creek confluence near Stacher Ford, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	10.80
VAS-O12R_NFH03C04 / North Fork Holston River / Mainstem near Roebuck, from Smith Creek confluence at the Holston community upstream to the Little Moccasin Creek confluence at Horseshoe Bend, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	8.43
VAS-O13R_NFH01A94 / North Fork Holston River / Mainstem from confluence of Big Moccasin Creek downstream to Tennessee state line, WQS Section 1a.	4A	Mercury in Fish Tissue	1994	L	5.32
VAS-O13R_NFH02A94 / North Fork Holston River / Mainstem from	4A	Mercury in Fish Tissue	1994	L	18.72

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

the confluence of Cove Creek south of Maces Spring, downstream to confluence of Big Moccasin Creek south of Weber City, WQS Section 1a.

North Fork Holston River		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fish Consumption				
	Mercury in Fish Tissue - Total Impaired Size by Water Type:			**81.99**

Sources:

Industrial Point Source Discharge

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O10R-01-PCB** **North Fork Holston River**

Cause Location: This segment begins in Saltville at river mile 85.40 and extends to the Route 80 bridge. Historically there has been an error in the segments that are included in this impairment due to a discrepancy in the VDH website.

City / County: Scott Co. Smyth Co. Washington Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

The Virginia Department of Health added polychlorinated biphenyls (PCBs) to the fish consumption ban in 12/13/2004. Stations 6CNFH059.65 and 6CNFH039.18 revealed PCBs in the sediment.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_NFH01A94 / North Fork Holston River / From Rt. 91 near Broady Bottom above Saltville to Robertson Branch confluence in WQS, WQS Section 1.	5A	PCB in Fish Tissue	1996	L	1.83
VAS-O11R_NFH02B10 / North Fork Holston River / From Tumbling Creek confluence downstream to Rt. 80 bridge crossing, WQS Section 1a.	5A	PCB in Fish Tissue	1996	L	8.52
VAS-O11R_NFH03A94 / North Fork Holston River / From confluence of Robertson Branch near Allison Gap, downstream to confluence of Tumbling Creek in WQS Section 1a.	5A	PCB in Fish Tissue	1996	L	4.92

North Fork Holston River **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:			**15.27**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O10R-05-BAC** **North Fork Holston River Tributaries**

Cause Location: This segment includes the headwaters of Laurel Creek within Jefferson National Forest upstream of the Roaring Fork confluence downstream to the North Fork Holston River confluence, Locust Cove Creek which is a tributary to the North Fork Holston River, Robertson Branch from the headwaters to the confluence with the North Fork Holston River, Turkey Run Creek from the headwaters to the confluence with the North Fork Holston River at McCready, and Beaver Creek.

City / County: Bland Co. Smyth Co. Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM station 6CLAE000.62 had a 25% exceedance of the E.coli water quality standard and station 6CLOC000.14 had a 66% exceedance, 6CRRB000.06 had a 25% exceedance, 6CTUR000.08 had 45% exceedance, and 6CBVR000.03 had a 66% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_BVR01A02 / Beaver Creek / From headwaters on Walker Mountain east of Page Hollow, downstream to mile 2.8 near Oak Grove, WQS Section 1.	4A	Escherichia coli	2010	L	1.92
VAS-O10R_BVR01B04 / Beaver Creek / From North Fork Holston River confluence near North Holston upstream 2.8 miles, WQS Section 1, DGIF ii.	4A	Escherichia coli	2010	L	2.82
VAS-O10R_LAE01A02 / Laurel Creek / Headwaters within Jefferson National Forest upstream of the Roaring Fork confluence through Poor Valley, WQS Section 1, DGIF vi.	4A	Escherichia coli	2010	L	2.65
VAS-O10R_LAE02A02 / Laurel Creek, middle / From Little Tumbling Creek confluence at Tannersville downstream to confluence with North Fork Holston River. at Broadford, WQS Section 1, DGIF ***.	4A	Escherichia coli	2010	L	6.48
VAS-O10R_LOC01A02 / Locust Cove Creek / A North Fork Holston tributary near Rich Valley High School from headwaters near Rt. 16 on Brushy Mountain in Jefferson National Forest, in WQS Section 1.	4A	Escherichia coli	2006	L	8.88
VAS-O10R_RRB01A02 / Robertson Branch / Mainstem from headwaters at Redrock Mountain downstream through Allison Gap to North Fork Holston River confluence in WQS Section 1.	4A	Escherichia coli	2010	L	3.26
VAS-O10R_TUR01A10 / Turkey Run Creek / A North Fork Holston River tributary from Whiterock Mountain to confluence with North Fork Holston River at McCready in WQS Section 1.	4A	Escherichia coli	2010	L	3.71

North Fork Holston River Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**29.72**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_LAE01A02 / Laurel Creek / Headwaters within Jefferson National Forest upstream of the Roaring Fork confluence through Poor Valley, WQS Section 1, DGIF vi.	4A	Fecal Coliform	2004	L	2.65
VAS-O10R_LAE02A02 / Laurel Creek, middle / From Little Tumbling Creek confluence at Tannersville downstream to confluence	4A	Fecal Coliform	2006	L	6.48

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

with North Fork Holston River. at Broadford, WQS Section 1, DGIF ***.

VAS-O10R_LOC01A02 / Locust Cove Creek / A North Fork Holston tributary near Rich Valley High School from headwaters near Rt. 16 on Brushy Mountain in Jefferson National Forest, in WQS Section 1.	A	Fecal Coliform	2006	L	8.88

North Fork Holston River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**18.01**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O10R-05-BEN** **Laurel Creek**

Cause Location: This segment includes the headwaters within Jefferson National Forest in Bland County downstream to the confluence with Roaring Fork.

City / County: Bland Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological stations located at 6CLAE018.29 was impaired based on the VSCI.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_LAE01A02 / Laurel Creek / Headwaters within Jefferson National Forest upstream of the Roaring Fork confluence through Poor Valley, WQS Section 1, DGIF vi.	5A	Benthic-Macroinvertebrate Bioassessments	2002	L	2.65

Laurel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.65**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O10R-08-BEN** **Little Tumbling Creek**

Cause Location: This segment includes from the power line crossing upstream to the Laurel Bed Lake discharge in Clinch Mountain State Wildlife Management Area.

City / County: Smyth Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4C

Discharge from Laurel Bed Lake into boggy area (possibly created by Beaver dams).

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O10R_LTC01A02 / Little Tumbling Creek / Between Clinch Mountain and Flattop Mountain from power line crossing upstream to headwaters in Clinch Mountain State Wildlife Management Area, WQS Section 1, DGIF ii.	4C	Benthic-Macroinvertebrate Bioassessments			5.79

Little Tumbling Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**5.79**

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11L-01-TEMP** **Hidden Valley Lake**

Cause Location: This is a warm water fishery owned by the Department of Game and Inland Fisheries.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5C

Station 6CBRU010.91 had a 83% exceedance of the water quality standard for temperature.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11L_BRU01A02 / Hidden Valley Lake / Hidden Valley Lake is a DGIF impoundment situated atop Clinch Mountain. At normal pool elevation, the reservoir has a maximum depth of 24 feet and a mean depth of 14 feet. Section 1	5C	Temperature, water	2010	L	61.10

Hidden Valley Lake	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:		**61.10**	

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11L-02-TEMP** **Laurel Bed Lake**

Cause Location: This lake is owned by the Department of Game and Inland Fisheries and lies within Clinch Mountain Wildlife Management Area.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5C

Station 6CLAU001.84 had a 14% exceedance of the water quality standard for temperature.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11L_LAU01A02 / Laurel Bed Lake / This lake is owned by DGIF and lies within Clinch Mountain State Wildlife Management Area. Mountain slope, 20 to 30 degrees, maximum depth 11.3 M, public access by permit, boat ramp, fishing, camping, picnicking, WQS Section 1.	5C	Temperature, water	2010	L	359.43

Laurel Bed Lake	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:		**359.43**	

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-03-BEN** **North Fork Holston River**

Cause Location: This segment extends from the confluence of Robertson Branch downstream to the confluence of Tumbling Creek.

City / County: Scott Co. Smyth Co. Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

A biological station located at 6CNFH080.45 was impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_NFH03A94 / North Fork Holston River / From confluence of Robertson Branch near Allison Gap, downstream to confluence of Tumbling Creek in WQS Section 1a.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	4.92

North Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.92**

Sources:

Natural Sources

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-03-CHLR** **North Fork Holston**

Cause Location: This segment of the North Fork Holston River extends from the confluence with Robertson Branch in Saltville to the Tumbling Creek confluence.

City / County: Scott Co. Smyth Co. Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Chloride / 4A

The benthic Total Maximum Daily Load (TMDL) was completed in 2006 and confirmed that there was a chloride impairment due to natural conditions.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_NFH03A94 / North Fork Holston River / From confluence of Robertson Branch near Allison Gap, downstream to confluence of Tumbling Creek in WQS Section 1a.	4A	Chloride	1996	L	4.92

North Fork Holston	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Chloride - Total Impaired Size by Water Type:			**4.92**

Sources:

Natural Sources

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-04-BAC** **Logan Creek**

Cause Location: Logan Creek is a North Fork Holston tributary. This segment includes the mainstem from the headwaters to the North Fork Holston confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CLOG000.12 had a 25% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_LOG01A02 / Logan Creek / From headwaters, north of Meadowview through Lindell parallel to Rt. 80, to North Fork Holston River confluence, WQS Section 1.	4A	Escherichia coli	2006	L	5.42

Logan Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**5.42**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-05-BAC** **Toole Creek**

Cause Location: Toole Creek is a North Fork Holston tributary. This segment includes the mainstem from headwaters to North Fork Holston confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CTOO000.25 had a 25% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_TOO01A98 / Toole Creek / A North Fork Holston tributary. Mainstem from headwaters through Whites Mill community to North Fork Holston confluence, WQS Section 1, DGIF ii.	4A	Escherichia coli	2006	L	5.85

Toole Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**5.85**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-08-BAC** **Brumley Creek**

Cause Location: From North Fork Holston River confluence upstream 4 miles to Duncanville, WQS Section 1, DGIF ***

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

Relisted in 2016: AWQM station 6CBRU000.20 had a 12% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_BRU01B04 / Brumley Creek / From North Fork Holston confluence upstream 4 miles to Duncanville, WQS Section 1, DGIF ***.	4A	Escherichia coli	2008	L	4.17

Brumley Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.17**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-09-BAC** **East Fork Wolf Creek**

Cause Location: This segment parallels Route 80 north of Hayter's Gap.

City / County: Russell Co. Smyth Co. Tazewell Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CEFW000.46 has a 12% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_EWF01A12 / East Fork Wolf Creek / In Poor Valley parallel to Route 80 north of Hayters Gap community.	4A	Escherichia coli	2012	L	3.47

East Fork Wolf Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**3.47**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-11-BAC** **Finley Creek**

Cause Location: This segment is a North Fork Holston River tributary at Glenford parallel to Route 741, west of Lindell.

City / County: Russell Co. Smyth Co. Tazewell Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CFIN001.26 has a 12% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_FIN01A12 / Finley Creek / North Fork Holston River tributary at Glenford, west of Lindell, Parallels Rt. 741 and unmaintained road.	4A	Escherichia coli	2012	L	1.90

Finley Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**1.90**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O11R-12-BAC** **West Fork Wolf Creek**

Cause Location: This segment is west of Hayter's Gap between Little Mountain and Clinch Mountain parallel to Route 689.

City / County: Russell Co. Smyth Co. Tazewell Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station at 6CWOC000.05 had a 33% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O11R_WOC01A12 / West Fork Wolf Creek / Poor Valley between Little Mountain and Clinch Mountain west of Hayters Gap community.	4A	Escherichia coli	2012	L	3.16

West Fork Wolf Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**3.16**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O12R-02-BAC** **Abrams Creek**

Cause Location: Abrams Creek is a North Fork Holston River tributary. This segment includes the mainstem from the headwaters to the North Fork Holston River confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CABR001.00 had a 16% exceedance of the water quality standard for E.coli.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O12R_ABR01A00 / Abrams Creek / Mainstem from Burson Place to confluence with North Fork Holston River near Stacher Ford in WQS Section 1.	4A	Escherichia coli	2006	L	11.77

Abrams Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**11.77**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O12R-03-BAC** **Cove Creek and Tribs**

Cause Location: Cove Creek is a North Fork Holston River tributary. This segment includes the mainstem from the headwaters to the North Fork Holston River confluence. Rich Valley Unnamed Tributary is a tributary to Fleenor Branch near Valley Institute Elementary School.

City / County: Scott Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CCOV002.44 had a 27% exceedance and station 6AXEO000.25 had a 50% exceedance of the bacteria water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O12R_COV01A00 / Cove Creek / From headwaters south of Valley Institute to North Fork Holston River confluence south of Maces Spring in WQS Section 1.	4A	Escherichia coli	2006	L	13.36
VAS-O12R_XEO01A12 / Rich Valley unnamed tributary / Unnamed tributary to Fleenor Branch near Valley Institute, WQS Section 1.	4A	Escherichia coli	2018	L	0.85

Cove Creek and Tribs **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**14.21**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O12R-03-BEN** **Greendale Creek**

Cause Location: This segment extends from the North Fork Holston River confluence upstream 4.1 miles.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6CGRN003.29 was impaired based on VSCI scores of 53 and 54 in 2007.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O12R_GRN01A00 / Greendale Creek / Greendale Creek from North Fork Holston confluence east of Rt. 19 bridge, upstream 4.1 miles to Black Hollow Road, WQS Section 1, vi.	5A	Benthic-Macroinvertebrate Bioassessments	2010	M	5.03

Greendale Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**5.03**

Sources:

- Highway/Road/Bridge Runoff (Non-construction Related)
- Livestock (Grazing or Feeding Operations)
- Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O12R-04-BAC** **Little Moccasin Creek**

Cause Location: Little Moccasin Creek is a North Fork Holston River tributary. This segment includes the mainstem from the headwaters to the North Fork Holston River confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CLMC000.05 had a 16% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O12R_LMC01A02 / Little Moccasin Creek / Mainstem from headwaters on Brumley Mountain to North Fork Holston River confluence, west of Highway 19 bridge at Holston community, WQS Section 1.	4A	Escherichia coli	2006	L	5.02

Little Moccasin Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**5.02**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O12R-06-BAC** **Smith Creek and Gaspard Creek**

Cause Location: Smith Creek is a North Fork Holston River tributary. This segment includes the mainstem from the headwaters to the North Fork Holston River confluence and Gaspard Creek a Smith Creek tributary near Craigs Mill.

City / County: Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CSMI000.22 had a 41% exceedance and station 6CGAS000.45 had a 35% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O12R_GAS01A16 / Gaspard Creek / Smith Creek tributary near Craigs Mill, Section 1.	4A	Escherichia coli	2016	L	1.37
VAS-O12R_SMI01A02 / Smith Creek / Tributary originating near Withers, confluences with North Fork Holston at Horseshoe Bend, WQS Section 1.	4A	Escherichia coli	2006	L	8.12

Smith Creek and Gaspard Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**9.49**

Sources:

Grazing in Riparian or Shoreline Zones	Rural (Residential Areas)	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O13R-03-BAC** **North Fork Holston River Tributaries**

Cause Location: This segment includes the mainstem of Blue Springs Branch from the headwaters to the confluence of the North Fork Holston River, the mainstem of Dowell Branch downstream to the confluence with the North Fork Holston River, the mainstem of Hilton Creek from the confluence with the North Fork Holston River upstream approximately 1.5 miles, 1.34 miles of an unnamed tributary immediately downstream of Hiltons Creek at Owen Corner, and Possum Creek from the headwaters downstream to the confluence with the North Fork Holston River.

City / County: Scott Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

AWQM station at 6CBLU000.15 had a 83% exceedance of the E.coli water quality standard, station 6CDOW000.02 had a 41% exceedance of the standard, station 6CHIL000.02 had a 27% exceedance, 6CXBV000.21 had a 30% exceedance and 6CPSM000.04 had a 33% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O13R_BLU01A08 / Blue Springs Branch & tributaries / Tributary at Maces Spring, flows through Eddington Gap, WQS Section 1.	4A	Escherichia coli	2008	L	3.73
VAS-O13R_DOW01A08 / Dowell Branch / North Fork Holston tributary that flows through Dowell Gap between Blue Springs Branch and Hilton Creek.	4A	Escherichia coli	2008	L	1.78
VAS-O13R_HIL01A08 / Hilton Creek / Mainstem segment from water intake downstream through Hilton community and Hilton Gap to North Fork Holston confluence, section 1.	4A	Escherichia coli	2008	L	1.85
VAS-O13R_PSM01A02 / Possum Creek / From Jones Branch confluence south of Kermit at SR 634, to North Fork Holston River confluence near Tennessee state line, WQS Section 1.	4A	Escherichia coli	2010	L	15.89
VAS-O13R_XBV01A08 / Unnamed tributary at Owen Corner / Tributary from north confluences with North Fork Holston River at Brickyard Gap downstream of Hiltons Creek.	4A	Escherichia coli	2008	L	1.37

North Fork Holston River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**24.62**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* O14R-01-BAC** **Big Moccasin Creek**

Cause Location: This segment begins 8.01 miles upstream of the PWS segment and continues downstream to rivermile 18.91 at unnamed tributary. It also includes the mainstem from Red Hill Branch confluence downstream to the North Fork Holston River confluence.

City / County: Scott Co. Washington Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6CBMC000.38 had a 25% exceedance of the E. coli water quality standard. Station 6CBMC002.90 had a 15% exceedance of the bacteria water quality standard. Station 6CBMC026.32 had a 23% exceedance of the E.coli standard, station 6CBMC042.54 had a 41% exceedance and station 6CBMC049.05 had a 50% exceedance.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-O14R_BMC01A98 / Big Moccasin Creek / From confluence of Big Moccasin and Little Moccasin Creeks downstream to North Fork Holston River confluence in WQS Section 1, Weber City area.	4A	Escherichia coli	2012	L	2.87
VAS-O14R_BMC04A00 / Big Moccasin Creek / From Middle Fork Moccasin Creek and South Fork Moccasin Creek confluence downstream 7.87 miles to Lick Skillet Hollow in WQS Section 1.	4A	Escherichia coli	2010	L	8.24
VAS-O14R_BMC05A02 / Big Moccasin Creek / Upstream of Snowflake and downstream of Dean Branch confluence south of Nickelsville, WQS Section 1.	4A	Escherichia coli	2008	L	10.55
VAS-O14R_BMC06A02 / Big Moccasin Creek / Segment is approximately half in Scott County and half in Russell County in WQS Section 1, upstream at Fugues Hill and ends at Dean Branch confluence.	4A	Escherichia coli	2008	L	9.69
VAS-O14R_BMC07A02 / Big Moccasin Creek / From end of PWS segment at Fugate Hill upstream 8.01 miles to Lick Skillet Hollow, WQS Section 1.	4A	Escherichia coli	2008	L	8.24

Big Moccasin Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**39.59**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P01L-03-HG** **Lake Witten**

Cause Location: This Lake is located in Cavitts Creek Park in Tazewell County.

City / County: Tazewell Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Two largemouth fish tissue samples collected in May 2007 exceeded the Virginia Department of Heath's level of concern for Mercury (Hg).

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01L_CAV01A10 / Lake Witten / In Cavitts Creek Park this recreation reservoir was constructed by the U.S. Natural Resource Conservation Service, the lake is owned by Tazewell County; in WQS Section 2.	5A	Mercury in Fish Tissue	2010	L	53.17

Lake Witten **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**53.17**	

Sources:

Atmospheric Deposition - Toxics	Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P01R-01-BAC** **Clinch River**

Cause Location: This segment includes the mainstream from Lincolnshire Branch confluence downstream to Deskin Creek.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BCLN346.60 had a 50% exceedance of the E.coli water quality standard and station 6BCLN348.00 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_CLN01A98 / Clinch River / Mainstem from North Fork Clinch River confluence through Town of Tazewell to Plum Creek confluence, WQS Section 2.	4A	Escherichia coli	2010	L	6.14
VAS-P02R_CLN01A98 / Clinch River / Mainstream from Plum Creek near Pisgah downstream to Deskins Creek near Maxwell, WQS Section 2.	4A	Escherichia coli	2010	L	6.11

Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**12.25**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_CLN01A98 / Clinch River / Mainstem from North Fork Clinch River confluence through Town of Tazewell to Plum Creek confluence, WQS Section 2.	4A	Fecal Coliform	2004	L	6.14
VAS-P02R_CLN01A98 / Clinch River / Mainstream from Plum Creek near Pisgah downstream to Deskins Creek near Maxwell, WQS Section 2.	4A	Fecal Coliform	2006	L	6.11

Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**12.25**

Sources:

Rural (Residential Areas) Source Unknown Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P01R-01-BEN** **Clinch River and Cavitts Creek**

Cause Location: This segment includes the mainstream from Lincolnshire Branch confluence downstream to the Plum Creek confluence and the lower mainstem of Cavitts Creek from Johnson Branch to the confluence with the Clinch River at River Jack.

City / County: Tazewell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

The biological station at 6BCLN346.80 was impaired based on VSCI scores. The biological station at 6BCAV000.05 was impaired based on VSCI scores of 45.72 and 48.14 in 2014.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_CAV01A00 / Cavitts Creek / Lower mainstem from Johnson Branch to confluence with Clinch River at River Jack in WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2016	L	2.40
VAS-P01R_CLN01A98 / Clinch River / Mainstem from North Fork Clinch River confluence through Town of Tazewell to Plum Creek confluence, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	6.14

Clinch River and Cavitts Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**8.54**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_CLN01A98 / Clinch River / Mainstem from North Fork Clinch River confluence through Town of Tazewell to Plum Creek confluence, WQS Section 2.	4A	Sedimentation/Siltation	2010	L	6.14

Clinch River and Cavitts Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**6.14**

Sources:

Animal Feeding Operations (NPS)	Crop Production (Crop Land or Dry Land)	Loss of Riparian Habitat	Rural (Residential Areas)
Unrestricted Cattle Access	Urban Runoff/Storm Sewers		

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P01R-02-BAC** **Plum Creek and North Fork Clinch River**

Cause Location: This segment extends from the headwaters of Plum Creek to the Clinch River confluence and North Fork Clinch River downstream to the confluence with the South Fork Clinch River at Fourway.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM stations 6BPLU000.40 and 6BNCL000.30 both had a 16% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_NCL01A04 / North Fork Clinch River / Confluences with South Fork Clinch River at Fourway and extends upstream to unnamed tributary just past the SR 651/US460 intersection, WQS Section 2c.	4A	Escherichia coli	2010	L	2.61
VAS-P01R_PLU01A04 / Plum Creek / Central Tazewell County from Frog Level to Clinch River confluence, WQS Section 2.	4A	Escherichia coli	2010	L	2.88

Plum Creek and North Fork Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**5.49**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_PLU01A04 / Plum Creek / Central Tazewell County from Frog Level to Clinch River confluence, WQS Section 2.	4A	Fecal Coliform	2004	L	2.88

Plum Creek and North Fork Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**2.88**

Sources:

Grazing in Riparian or Shoreline Zones	Source Unknown	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P01R-02-BEN** **Plum Creek**

Cause Location: This segment extends from the headwaters of Plum Creek downstream to the confluence with the Clinch River.

City / County: Tazewell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6BPLU002.15 was impaired based on a VSCI score of 41.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_PLU01A04 / Plum Creek / Central Tazewell County from Frog Level to Clinch River confluence, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2010	L	2.88

Plum Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.88**

Sources:

Loss of Riparian Habitat Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P01R-03-BAC** **South Fork Clinch River and Cavitts Creek**

Cause Location: This segment includes the South Fork Clinch River and its tributaries from the Tazewell raw water intake upstream 5 miles and Cavitts Creek from the Johnson Branch confluence downstream to the confluence with the Clinch River at Riverjack.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BSFK000.77 had a 41% exceedance of the E.coli water quality standard and station 6BCAV000.02 had a 25% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P01R_CAV01A00 / Cavitts Creek / Lower mainstem from Johnson Branch to confluence with Clinch River at River Jack in WQS Section 2.	4A	Escherichia coli	2010	M	2.40
VAS-P01R_SFK01A10 / South Fork Clinch River / Portion of South Fork Clinch River from Tazewell raw water intake upstream 5 miles, WQS Section 2c.	4A	Escherichia coli	2010	M	4.17

South Fork Clinch River and Cavitts Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**6.57**

Sources:

Rural (Residential Areas) Source Unknown Unrestricted Cattle Access Wastes from Pets

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P02R-02-BAC** **Laurel Fork**

Cause Location: An Indian Creek tributary parallel to Whetstone Ridge that confluences at the Mouth of Laurel.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BLRF000.03 had a 16% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P02R_LRF01A10 / Laurel Fork / Indian Creek tributary parallel Whetstone Ridge, confluences at Mouth of Laurel, WQS Section 2.	4A	Escherichia coli	2012	L	4.57

Laurel Fork **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.57**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P03R-01-BAC** **Clinch River Tributaries**

Cause Location: This segment includes the lower mainstem of Middle Creek from river mile 2.53 downstream to the Clinch River confluence, Coal Creek from the confluence with Left Fork Coal Creek to the confluence with the Clinch River, Big Creek from the confluence with West Fork to the confluence with the Clinch River, Mudlick Creek from the confluence with Zeke Creek downstream to the confluence with the Clinch River, Town Hill Creek from the confluence with Little Town Hill Creek to the confluence with the Clinch River, Deskin Branch which extends from an unnamed tributary through the golf course in Maxwell to the confluence with the Clinch River, and Pounding Mill Branch, a Clinch River tributary south of Pounding Mill.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BMID000.20 had a 50% exceedance of the E.coli water quality standard, 6BBIG000.12 had a 66% exceedance, 6BCOL000.12 had an 54% exceedance, 6BMCK000.11 had a 16% exceedance, 6BTHC000.03 had a 50% exceedance, 6BDES000.06 had a 41% exceedance and station 6BPON000.04 had a 36% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P02R_DES01A10 / Deskin Branch / Clinch River tributary that flows through Golf Course at Maxwell to Clinch River, WQS Section 2.	4A	Escherichia coli	2010	L	0.53
VAS-P02R_PON01A10 / Pounding Mill Branch / A Clinch River tributary, south of Pounding Mill, WQS Section 2.	4A	Escherichia coli	2018	L	4.34
VAS-P03R_BIG01A10 / Big Creek / Clinch River tributary from north of Richlands, WQS Section 2b.	4A	Escherichia coli	2010	L	1.39
VAS-P03R_COL01A04 / Coal Creek / From confluence with Clinch River, at Raven, upstream through Red Ash to Left Fork Coal Creek confluence, WQS Section 2.	4A	Escherichia coli	2010	L	3.12
VAS-P03R_MCK01A10 / Mudlick Creek / A Clinch River tributary from the north at Doran, WQS Section 2.	4A	Escherichia coli	2010	L	2.11
VAS-P03R_MID01A98 / Middle Creek / Lower mainstem from Stony Ridge downstream to Clinch River confluence near Cedar Bluff, WQS Section 2.	4A	Escherichia coli	2006	L	3.05
VAS-P03R_THC01A10 / Town Hill Creek / Clinch River tributary from the north at Clinch Valley Memorial Cemetery, WQS Section 2.	4A	Escherichia coli	2010	L	0.25

Clinch River Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**14.79**

Sources:

Rural (Residential Areas) Source Unknown Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P03R-01-BEN** **Clinch River Tributaries**

Cause Location: This segment extends from confluence with Clinch River upstream to the Left Fork Coal Creek confluence, Big Creek from the confluence with West Fork downstream to the confluence with the Clinch River, Mudlick Creek from the confluence with Zeke Creek downstream to the confluence with the Clinch River, and Town Hill Creek from the confluence with Little Town Hill Creek downstream to the confluence with the Clinch River.

City / County: Tazewell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Probabilistic Monitoring station at 6BCOL001.93, 6BBIG000.99, 6BMCK000.04, and 6BTHC000.06 were impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P03R_BIG01A10 / Big Creek / Clinch River tributary from north of Richlands, WQS Section 2b.	5A	Benthic-Macroinvertebrate Bioassessments	2010	L	1.39
VAS-P03R_COL01A04 / Coal Creek / From confluence with Clinch River, at Raven, upstream through Red Ash to Left Fork Coal Creek confluence, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2008	L	3.12
VAS-P03R_MCK01A10 / Mudlick Creek / A Clinch River tributary from the north at Doran, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2010	L	2.11
VAS-P03R_THC01A10 / Town Hill Creek / Clinch River tributary from the north at Clinch Valley Memorial Cemetery, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2010	L	0.25

Clinch River Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**6.87**

Sources:

Coal Mining | Rural (Residential Areas) | Silviculture Activities | Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P03R-02-BAC** **Clinch River**

Cause Location: The community of Raven is located here and the segment includes the mainstem from just upstream of the Town Hill Creek confluence downstream to the Mill Creek confluence. It also includes the mainstem of the Clinch River from the Mill Creek confluence upstream to former Raven-Doran raw water intake.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM station located at 6BCLN315.11 had a 33% exceedance of the E.coli water quality standard and 6BCLN321.13 had a 16% exceedance.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P03R_CLN01A98 / Clinch River / From the former raw water intake just upstream of the Town Hill Creek confluence downstream to the Mill Creek confluence south of Raven, WQS Section 2b.	4A	Escherichia coli	2010	L	5.55
VAS-P03R_CLN02A00 / Clinch River / Clinch River from Town of Richlands former raw water raw water intake upstream to Dry Branch confluence, near Cedar Bluff, WQS Section 2b.	4A	Escherichia coli	2004	L	3.01

Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**8.56**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P03R_CLN01A98 / Clinch River / From the former raw water intake just upstream of the Town Hill Creek confluence downstream to the Mill Creek confluence south of Raven, WQS Section 2b.	4A	Fecal Coliform	2002	L	5.55

Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**5.55**

Sources:

Rural (Residential Areas) Urban Runoff/Storm Sewers

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P03R-02-HG** **Clinch River**

Cause Location: This segment begins just upstream of the Town Hill confluence and continues downstream to the Mill Creek confluence.

City / County: Tazewell Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Three fish samples collected in 2007 exceeded the Department of Environmental Quality's screening value for Mercury.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P03R_CLN01A98 / Clinch River / From the former raw water intake just upstream of the Town Hill Creek confluence downstream to the Mill Creek confluence south of Raven, WQS Section 2b.	5A	Mercury in Fish Tissue	2010	L	5.55

Clinch River **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:			**5.55**

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P04R-01-BAC** **Lewis Creek and Hess Creek**

Cause Location: This segment includes the mainstem from the Stone Branch confluence downstream to the Clinch River confluence.

City / County: Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BLWS000.06 had a 100% exceedance of the E.coli water quality standard, station 6BLWS004.84 had a 25% exceedance and 6BHES000.05 had a 33% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_HES01A10 / Hess Creek / A Swords Creek tributary flowing from Groundhog Hollow to the east, south of Dye, WQS Section 2.	4A	Escherichia coli	2010	L	1.04
VAS-P04R_LWS01A10 / Lewis Creek / Grassy Creek confluence downstream to Stone Branch confluence, at Flatrock, WQS Section 2.	4A	Escherichia coli	2010	L	3.45
VAS-P04R_LWS01A98 / Lewis Creek / Mainstem from the Stone Branch confluence downstream through Putnam, to the Clinch River confluence, WQS Section 2.	4A	Escherichia coli	2010	L	4.98

Lewis Creek and Hess Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**9.47**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_LWS01A98 / Lewis Creek / Mainstem from the Stone Branch confluence downstream through Putnam, to the Clinch River confluence, WQS Section 2.	4A	Fecal Coliform	2006	L	4.98

Lewis Creek and Hess Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**4.98**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P04R-01-BEN** **Lewis Creek**

Cause Location: This segment includes the mainstem from the Stone Branch confluence downstream to the Clinch River confluence.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

The biological station located at 6BLWS000.90 and Probabilistic Monitoring station located at 6BLWS003.88 were impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_LWS01A98 / Lewis Creek / Mainstem from the Stone Branch confluence downstream through Putnam, to the Clinch River confluence, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	4.98

Lewis Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.98**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_LWS01A98 / Lewis Creek / Mainstem from the Stone Branch confluence downstream through Putnam, to the Clinch River confluence, WQS Section 2.	4A	Sedimentation/Siltation	2010	L	4.98

Lewis Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**4.98**

Sources:

Crop Production (Crop Land or Dry Land)	Impacts from Abandoned Mine Lands (Inactive)	Rural (Residential Areas)	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P04R-02-BAC** **Swords Creek**

Cause Location: This segment extends from the Sulphur Spring Branch confluence downstream to the confluence with the Clinch River.

City / County: Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

Station 6BSWO001.81 had a 13% exceedance and 6BSWO000.11 had 23% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_SWD01A00 / Swords Creek / Mainstem from Sulphur Spring Branch confluence at Dye downstream to confluence with Clinch River at the Swords Creek community, WQS Section 2.	4A	Escherichia coli	2010	L	2.91

Swords Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**2.91**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P04R-02-BEN** **Swords Creek**

Cause Location: This segment includes the mainstem from the Sculpture Spring Branch confluence downstream to the confluence with Clinch River.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station located at 6BSWO000.11 was impaired based on VSCI scores of 47.68 and 68.53.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_SWD01A00 / Swords Creek / Mainstem from Sulphur Spring Branch confluence at Dye downstream to confluence with Clinch River at the Swords Creek community, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2006	L	2.91

Swords Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.91**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P04R-03-BEN** **Mill Creek**

Cause Location: From the Clinch River confluence near West Raven upstream to the confluence of Right Fork Mill Creek.

City / County: Russell Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station located at 6BMLG000.55 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P04R_MLG01A00 / Mill Creek / From Clinch River confluence near West Raven upstream 2.7 miles along Tazewell/Russell County line to the confluence of Right Fork Mill Creek, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	3.22

Mill Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.22**

Sources:

Rural (Residential Areas)
Streambank Modifications/destabilization

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P05R-01-BAC** **Indian Creek**

Cause Location: This segment extends from the Highway 19 bridge to the Little River confluence at Wardell.

City / County: Russell Co. Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BIDN000.69 had a 23% exceedance of the bacteria water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_IDN01A04 / Indian Creek / Highway 19 crossing to Little River confluence at Wardell, WQS Section 2.	4A	Escherichia coli	2010	L	4.10

Indian Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.10**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_IDN01A04 / Indian Creek / Highway 19 crossing to Little River confluence at Wardell, WQS Section 2.	4A	Fecal Coliform	2004	L	4.10

Indian Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**4.10**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P05R-04-BAC** **Little River**

Cause Location: This segment includes the mainstem above the Claypool Hill wastewater treatment plant downstream to the confluence with Grays Branch.

City / County: Russell Co. Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BLTR0018.19 had a 46% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_LTR02A00 / Little River / Little River above Claypool Hill STP downstream to Laurel Creek confluence near Wardell, WQS Section 2g.	4A	Escherichia coli	2010	L	5.25
VAS-P05R_LTR02A02 / Little River / Laurel Creek confluence near Wardell downstream to Grays Branch confluence at Russell/Tazewell County line, WQS Section 2.	4A	Escherichia coli	2012	L	4.12

Little River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**9.37**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_LTR02A00 / Little River / Little River above Claypool Hill STP downstream to Laurel Creek confluence near Wardell, WQS Section 2g.	4A	Fecal Coliform	2004	L	5.25
VAS-P05R_LTR02A02 / Little River / Laurel Creek confluence near Wardell downstream to Grays Branch confluence at Russell/Tazewell County line, WQS Section 2.	4A	Fecal Coliform	2008	L	4.12

Little River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**9.37**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P05R-05-BAC** **Maiden Spring Creek**

Cause Location: This segment begins at the unnamed tributary at Buchanan Cemetery and continues downstream to the Little River confluence.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station 6BMSC001.53 had a 42% exceedance of the bacteria water quality standard and station 6BMSC008.98 had a 23% exceedance of the bacteria standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_MSC01A02 / Maiden Spring Creek / From the Little River confluence upstream to foot of Morris Knob north of Robbins Gap, WQS Section 2.	4A	Escherichia coli	2016	L	6.70
VAS-P05R_MSC01C04 / Maiden Spring Creek / This is the middle segment of Maiden Spring Creek from unnamed tributary with Buchanan Cemetery downstream through Thompson Valley to a Morris Knob tributary, WQS Section 2.	4A	Escherichia coli	2010	L	9.51

Maiden Spring Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**16.21**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_MSC01A02 / Maiden Spring Creek / From the Little River confluence upstream to foot of Morris Knob north of Robbins Gap, WQS Section 2.	4A	Fecal Coliform	2004	L	6.70
VAS-P05R_MSC01C04 / Maiden Spring Creek / This is the middle segment of Maiden Spring Creek from unnamed tributary with Buchanan Cemetery downstream through Thompson Valley to a Morris Knob tributary, WQS Section 2.	4A	Fecal Coliform	2004	L	9.51

Maiden Spring Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**16.21**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P05R-07-BEN** **Laurel Creek**

Cause Location: This segment is a Little River tributary from south of Wardell parallel to Route 609.

City / County: Russell Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Benthic special study station located at 6BLUC000.73 was impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P05R_LUC01A10 / Laurel Creek / Little River tributary that flows north draining Clinch Mountain Spur from Brown Gap, south of Wardell, WQS Section 2g.	4A	Benthic-Macroinvertebrate Bioassessments	2012	L	3.41

Laurel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.41**

Sources:

Rural (Residential Areas)	Streambank Modifications/destabilization

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P06R-01-BAC** **Big Cedar Creek and Tributaries**

Cause Location: This segment begins 5 miles upstream of Lebanon's raw water intake and continues downstream to the confluence with the Clinch River, Loop Creek from Route 80 to the Elk Garden Creek confluence, Burgess Creek from the Campbell Branch confluence to the Big Cedar Creek confluence and Elk Garden Creek from Elk Garden to the confluence with Big Cedar Creek.

City / County: Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station on Big Cedar Creek at 6BBCD001.89 had a 33% exceedance of the E.coli water quality standard, station 6BBCD006.66 had 41% exceedance of the E.coli standard and station 6BBCD009.83 had a 75% exceedance of the bacteria water quality standard. AWQM station on Burgess Creek at 6BBUG000.10 had a 66% exceedance of the E. coli water quality standard. AWQM stations on Elk Garden Creek had a 75% & 91% exceedance of the E. coli water quality standard. Two AWQM stations on Loop Creek at 6BLOO04.25 and 6BLOO006.03 had a 50% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P06R_BCD01A98 / Big Cedar Creek / From vicinity of Daughertys Cave downstream to confluence with Clinch River, WQS Section 2.	4A	Escherichia coli	2006	L	4.20
VAS-P06R_BCD02A00 / Big Cedar Creek / East of Lebanon, from Lebanon raw water intake downstream to Little Cedar Creek confluence, WQS Section 2.	4A	Escherichia coli	2006	L	2.79
VAS-P06R_BCD02A02 / Big Cedar Creek / North of Lebanon, from Little Cedar Creek confluence to SR 640 bridge near Daughertys Cave, WQS Section 2.	4A	Escherichia coli	2008	L	1.10
VAS-P06R_BCD03A00 / Big Cedar Creek / Big Cedar Creek headwaters from Lebanon's raw water intake to a point 5 miles upstream on Clinch Mountain, WQS Section 2i.	4A	Escherichia coli	2006	L	3.29
VAS-P06R_BUG01A06 / Burgess Creek / South of Lebanon from Campbell Branch confluence to confluence with Big Cedar Creek, WQS Section 2i.	4A	Escherichia coli	2006	L	1.55
VAS-P06R_EKG01A06 / Elk Garden Creek / From Elk Garden to confluence with Big Cedar Creek upstream to the end of PWS segment, WQS Section 2i.	4A	Escherichia coli	2006	L	3.49
VAS-P06R_EKG01A10 / Elk Garden Creek / Enters Big Cedar Creek near Elk Garden to the north above Rosedale, WQS Section 2.	4A	Escherichia coli	2012	L	8.08
VAS-P06R_LOO01A06 / Loop Creek / West of Corn Valley, from near Rt. 80 upstream to Elk Garden Creek confluence, WQS Section 2i.	4A	Escherichia coli	2006	L	2.59
VAS-P06R_LOO01B12 / Loop Creek / East of Lebanon from near Rt. 80, upstream to Sturgeon Branch confluence on the west side of Clinch Mountain.	4A	Escherichia coli	2012	L	3.98

Big Cedar Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**31.07**

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P06R_BCD01A98 / Big Cedar Creek / From vicinity of Daughertys Cave downstream to confluence with Clinch River, WQS Section 2.	4A	Fecal Coliform	2006	L	4.20
VAS-P06R_BCD02A02 / Big Cedar Creek / North of Lebanon, from Little Cedar Creek confluence to SR 640 bridge near Daughertys Cave, WQS Section 2.	4A	Fecal Coliform	2004	L	1.10

Big Cedar Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**5.30**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P06R-02-BAC** **Little Cedar Creek**

Cause Location: This segment includes Little Cedar Creek from the western edge of Lebanon to the confluence with Big Cedar Creek.

City / County: Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BLTL001.11 had a 72% exceedance rate of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P06R_LTL01A10 / Little Cedar Creek / Drains Lebanon, from the Campbell Branch confluence, Willis area, upstream to near SR 654, WQS Section 2.	4A	Escherichia coli	2018	M	6.04
VAS-P06R_LTL01A12 / Little Cedar Creek / A Big Cedar Creek tributary east of Lebanon in Section 2.	4A	Escherichia coli	2012	M	2.19

Little Cedar Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**8.23**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P07R-01-BAC** **Clinch River and Tributaries**

Cause Location: This segment includes the mainstem from the Big Cedar Creek confluence downstream to the Dumps Creek confluence. It also includes Thompson Creek from Coulwood to the confluence with The Clinch River and Weaver Creek from the confluence with Hart Creek to the confluence with the Clinch River.

City / County: Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BCLN271.50 had a 20% exceedance of the E.coli standard. Station 6BTMP003.58 had a 66% exceedance of the E.coli water quality standard and station 6BWEA004.32 had a 50% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P07R_CLN01A00 / Clinch River / Mainstem from Big Cedar Creek confluence downstream to Dumps Creek confluence at Carbo, WQS Section 2.	4A	Escherichia coli	2006	M	14.10
VAS-P07R_TMP01A06 / Thompson Creek / From Coulwood to confluence with Clinch River at Artrip, WQS Section 2.	4A	Escherichia coli	2006	M	4.45
VAS-P07R_TMP02A10 / Thompson Creek / Headwaters, west of Honaker downstream to just east of Coulwood parallel to N&W Railroad, WQS Section 2.	4A	Escherichia coli	2012	M	3.40
VAS-P07R_WEA01A06 / Weaver Creek / From headwaters at Bradley Gap on Big A Mountain to confluence with Clinch River west of Artrip, WQS, Section 2.	4A	Escherichia coli	2006	M	9.50

Clinch River and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**31.45**

Sources:

Rural (Residential Areas) Source Unknown Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P07R-01-BEN** **Clinch River Tributaries**

Cause Location: Thompson Creek from the confluence of an unnamed tributary east of Coulwood upstream 3.25 miles.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological station located at 6BTMP006.26 was impaired based on a VSCI score of 56.77.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P07R_TMP02A10 / Thompson Creek / Headwaters, west of Honaker downstream to just east of Coulwood parallel to N&W Railroad, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2010	L	3.40

Clinch River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.40**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P07R-02-BEN** **Mill Creek**

Cause Location: A Clinch River tributary, from the headwaters on Copper Ridge to Pennus Hollow.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station located at 6BMIF003.23 was impaired based on VSCI scores of 53.50 and 56.22.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P07R_MIF01A10 / Mill Creek / A Clinch River tributary, from headwaters on Copper Ridge to Pennus Hollow, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	1.84

Mill Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**1.84**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P09L-01-HG** **Bark Camp Lake**

Cause Location: This lake is also known as Corder Bottom Lake, located in Scott County.

City / County: Scott Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Three fish samples exceeded the Department of Environmental Quality's screening value for Mercury.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09L_LSR01A02 / Bark Camp Lake / Also known as Corder Bottom Lake; DGIF owned Scott County.	5A	Mercury in Fish Tissue	2010	L	41.06

Bark Camp Lake **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**41.06**	

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P09R-01-BAC** **Clinch River**

Cause Location: This segment includes the mainstem of the Clinch River from the Guest River confluence downstream to Little Stony Creek and from Little Stony Creek downstream to the Staunton Creek confluence, and from the Dumps Creek confluence downstream of the Lick Creek confluence, and from Lick Creek at St. Paul downstream to PWS segment.

City / County: Russell Co. Scott Co. Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BCLN237.09 had a 16% exceedance of the bacteria water quality standard. Station 6BCLN242.00 had a 33% exceedance, station 6BCLN246.30 had a 10.5% exceedance, and station 6BCLN249.62 had a 10.5% exceedance of the bacteria water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09R_CLN01A00 / Clinch River / Mainstem Clinch from Little Stony Creek confluence north of Mill Island downstream, past Dungannon, to Staunton Creek confluence, WQS Section 2.	4A	Escherichia coli	2012	M	5.99
VAS-P09R_CLN01A08 / Clinch River / Mainstem from Lick Creek confluence at Saint Paul downstream to PWS segment, near Craigen Tunnel, WQS Section 2.	4A	Escherichia coli	2014	M	3.31
VAS-P09R_CLN01B00 / Clinch River / Five miles of Clinch River mainstem above Carfax raw water intake, from Bull Run upstream to near Craigen Tunnel, WQS Section 2a.	4A	Escherichia coli	2014	M	4.93
VAS-P09R_CLN02B00 / Clinch River / Mainstem from Bull Run confluence at Carfax downstream to Guest River confluence at Russell/Scott County line, WQS Section 2.	4A	Escherichia coli	2014	M	2.04
VAS-P09R_CLN02B08 / Clinch River / Mainstem from Guest River confluence at Bangor, downstream to confluence of Little Stony Creek near Mill Island, WQS Section 2.	4A	Escherichia coli	2014	M	5.45

Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**21.72**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09R_CLN01A00 / Clinch River / Mainstem Clinch from Little Stony Creek confluence north of Mill Island downstream, past Dungannon, to Staunton Creek confluence, WQS Section 2.	4A	Fecal Coliform	2004	M	5.99

Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**5.99**

Sources:

Rural (Residential Areas) Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P09R-02-BAC** **Clinch River**

Cause Location: The Clinch River mainstem from the Lick Creek confluence at Boody, upstream to an unnamed tributary at rivermile 259.68, includes Kiser Bend, site of the Clinch River Steam Plant and the Clinch River mainstem from an unnamed tributary at rivermile 259.68 upstream to the Dumps Creek confluence, at Kiser Bend.

City / County: Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station at 6BCLN256.31 had a 30% exceedance of the bacteria water quality standard and station 6BCLN264.27 had a 19% exceedance of the bacteria water quality standard

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09R_CLN01C00 / Clinch River / Clinch River mainstem from Lick Creek confluence at Boody, upstream to unnamed tributary @ 259.68, Section 2a, x, includes Kiser Bend, site of Clinch River Steam Plant.	5A	Escherichia coli	2012	M	4.21
VAS-P09R_CLN01C14 / Clinch River / Clinch River mainstem from unnamed tributary @ 259.68, Section 2a, x, upstream to the Dumps Creek confluence, at Kiser Bend.	5A	Escherichia coli	2012	M	7.75

Clinch River **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**11.96**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P09R-03-BAC** **Staunton Creek & Fall Creek**

Cause Location: This segment includes both Staunton and Fall Creek from their headwaters to their confluences with the Clinch River.

City / County: Scott Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BFLC000.52 had a 41% exceedance of the E.coli water quality standard and station 6BSUT004.66 had a 41% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09R_FLC01A02 / Fall Creek / Fall Creek from Beaver Hollow confluence to Clinch River east of Dungannon, WQS Section 2, DGIF vi.	4A	Escherichia coli	2006	L	3.01
VAS-P09R_SUT01A02 / Staunton Creek & tributaries / Tributaries to Clinch River from Stone Mountain north of Buckner Ridge in Jefferson National Forest, east of Wood, WQS Section 2.	4A	Escherichia coli	2006	L	9.73

Staunton Creek & Fall Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**12.74**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P09R-05-BAC** **Russell Creek**

Cause Location: This segment includes the headwaters of Russell Creek downstream to the confluence with the Clinch River.

City / County: Russell Co. Scott Co. Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BRUS001.25 had a 16% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09R_RUS01A06 / Russell Creek / Clinch River tributary near Shannon Tunnel, through Virginia City from Nancy Ridge, WQS Section 2.	4A	Escherichia coli	2008	L	5.23

Russell Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**5.23**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P09R-08-BAC** **Cowan Creek**

Cause Location: This segment includes from Copper Ridge near Sunny Point at rivermile 2.7 to the confluence with Sinking Creek.

City / County: Scott Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

Station 6BCOC001.19 had a 16% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P09R_COC01A02 / Cowan Creek / Cowan Creek from Copper Ridge near Sunny Point at 2.7 to confluence with Sinking Creek, WQS Section 2.	5A	Escherichia coli	2018	L	4.15

Cowan Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.15**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P10R-01-BAC** **Lick Creek and Tributaries**

Cause Location: This segment includes the headwaters of Lick Creek and continues downstream to the confluence with the Clinch River, it also includes Cigarette Hollow and Right Fork Lick Creek.

City / County: Dickenson Co. Russell Co. Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM station located at 6BLCC006.75 had a 50% exceedance of the E.coli water quality standard, station 6BLCC002.84 had a 55% exceedance of the E.coli standard and station 6BLCC000.09 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P10R_GRV01A10 / Gravel Lick Creek / Lick Creek tributary from Hamlin upstream to Gravel Lick, north of Red Oak Ridge.	4A	Escherichia coli	2012	L	2.49
VAS-P10R_LCC01A98 / Lick Creek / Mainstem from unnamed tributary confluence at river mile 4.83, north of Sun, downstream to Clinch River confluence near Saint Paul, WQS Section 2.	4A	Escherichia coli	2006	L	4.92
VAS-P10R_LCC02A02 / Lick Creek / Mainstem from headwaters south of Trammel, through Dante, downstream to unnamed tributary confluence at river mile 4.85, WQS Section 2.	4A	Escherichia coli	2006	L	4.69

Lick Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**12.10**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P10R_LCC01A98 / Lick Creek / Mainstem from unnamed tributary confluence at river mile 4.83, north of Sun, downstream to Clinch River confluence near Saint Paul, WQS Section 2.	4A	Fecal Coliform	2002	L	4.92
VAS-P10R_LCC02A02 / Lick Creek / Mainstem from headwaters south of Trammel, through Dante, downstream to unnamed tributary confluence at river mile 4.85, WQS Section 2.	4A	Fecal Coliform	2002	L	4.69
VAS-P10R_LCR01A98 / Right Fork Lick Creek / Headwaters at Flint Gap downstream to Lick Creek confluence in Dante, WQS Section 2.	4A	Fecal Coliform	2004	L	3.04
VAS-P10R_XBM01A98 / Cigarette Hollow / Headwaters on Flat Top Ridge to Right Fork confluence, WQS Section 2.	4A	Fecal Coliform	2004	L	1.14

Lick Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**13.79**

Sources:

Rural (Residential Areas) Septage Disposal Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P10R-01-BEN** **Lick Creek and Tributaries**

Cause Location: This segment includes the headwaters of Lick Creek and continues downstream to the confluence with the Clinch River, it also includes Cigarette Hollow, Right Fork Lick and Laurel Branch.

City / County: Dickenson Co. Russell Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

Biological stations located at 6BLCC000.09, 6BLCC000.65 and 6BLCC005.99 were all impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P10R_LCC01A98 / Lick Creek / Mainstem from unnamed tributary confluence at river mile 4.83, north of Sun, downstream to Clinch River confluence near Saint Paul, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	4.92
VAS-P10R_LCC02A02 / Lick Creek / Mainstem from headwaters south of Trammel, through Dante, downstream to unnamed tributary confluence at river mile 4.85, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	4.69
VAS-P10R_LCR01A98 / Right Fork Lick Creek / Headwaters at Flint Gap downstream to Lick Creek confluence in Dante, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	3.04
VAS-P10R_LEL01A98 / Laurel Branch / Headwaters of Laurel Branch and Left Fork through West Dante community to Lick Creek confluence at Dante, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	5.52
VAS-P10R_XBM01A98 / Cigarette Hollow / Headwaters on Flat Top Ridge to Right Fork confluence, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	1.14

Lick Creek and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**19.31**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P10R_LCC01A98 / Lick Creek / Mainstem from unnamed tributary confluence at river mile 4.83, north of Sun, downstream to Clinch River confluence near Saint Paul, WQS Section 2.	4A	Sedimentation/Siltation	2010	L	4.92
VAS-P10R_LCC02A02 / Lick Creek / Mainstem from headwaters south of Trammel, through Dante, downstream to unnamed tributary confluence at river mile 4.85, WQS Section 2.	4A	Sedimentation/Siltation	2010	L	4.69

Lick Creek and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**9.61**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Loss of Riparian Habitat	Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P10R-06-BAC** **Honey Branch**

Cause Location: A Lick Creek tributary near Morefield, upstream to Honeycomb Branch, WQS Section 2.

City / County: Dickenson Co. Russell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

station 6BHON002.08 had a 23% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P10R_HON01A14 / Honey Branch / A Lick Creek tributary near Morefield, upstream to Honeycomb Branch, WQS Section 2.	5A	Escherichia coli	2018	L	2.89

Honey Branch **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**2.89**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-01-BEN** **Guest River and Tributaries**

Cause Location: This segment begins at the confluence with Sepulcher Creek and extends downstream to the confluence with the Clinch River and also includes Critical Fork, Bear Creek, and Selcer Branch.

City / County: Norton City Scott Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

DEQ biological stations 6BGUE006.50 and 6BGUE016.54 were impaired based on VSCI scores. Probabilistic monitoring station 6BSEL001.81 was impaired based on VSCI scored. Non agency data for Critical Fork, Bear Creek indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_BER02A00 / Bear Creek / Bear Creek from Town of Wise raw water intake downstream to Yellow Creek confluence, southeast of Wise, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	3.09
VAS-P11R_CRI01A14 / Critical Fork / Guest River tributary, origin on Indian Mountain and confluence at Dixiana, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.30
VAS-P11R_GUE01A00 / Guest River / Mainstem, from Crab Orchard Branch confluence downstream to confluence with Clinch River near Bangor, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	4.15
VAS-P11R_GUE02A98 / Guest River / Mainstem from Bad Branch confluence south of Coeburn downstream to Crab Orchard Branch confluence, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	3.09
VAS-P11R_GUE03A06 / Guest River / Mainstem from Sepulcher Creek confluence at Addington (mile 26.21) downstream to the Parson Branch confluence, immediately upstream of the Rt. 23 bridge near Esserville, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	2.62
VAS-P11R_GUE03A98 / Guest River / Mainstem from the Parson Branch confluence downstream to the Bad Branch confluence, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	16.78
VAS-P11R_GUE04A96 / Guest River / Mainstem from headwaters near Fox Gap downstream to the confluence of Sepulcher Creek at Addington, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	8.94
VAS-P11R_SEL01A14 / Selcer Branch / Hurricane Creek tributary east of Wise, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	2.05
VAS-P11R_XHW01A14 / Bear Creek tributary / South of Clinch Valley College, flows north from Gibson Cemetery area, WQS Section 2.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.21

Guest River and Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**43.23**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_GUE02A98 / Guest River / Mainstem from Bad Branch confluence south of Coeburn downstream to Crab Orchard Branch confluence, WQS Section 2.	4A	Sedimentation/Siltation	2012	L	3.09

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

VAS-P11R_GUE03A06 / Guest River / Mainstem from Sepulcher Creek confluence at Addington (mile 26.21) downstream to the Parson Branch confluence, immediately upstream of the Rt. 23 bridge near Esserville, WQS Section 2.	A	Sedimentation/Siltation	2010	L	2.62
VAS-P11R_GUE03A98 / Guest River / Mainstem from the Parson Branch confluence downstream to the Bad Branch confluence, WQS Section 2.	A	Sedimentation/Siltation	2010	L	16.78
VAS-P11R_GUE04A96 / Guest River / Mainstem from headwaters near Fox Gap downstream to the confluence of Sepulcher Creek at Addington, WQS Section 2.	A	Sedimentation/Siltation	2010	L	8.94

Guest River and Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Sedimentation/Siltation - Total Impaired Size by Water Type:			**31.43**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Rural (Residential Areas)	Silviculture Activities
Source Unknown	Surface Mining		

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-03-BAC** **Guest River and Bear Creek**

Cause Location: This segment extends from the Guest River mainstem at the confluence with Crab Orchard Creek downstream to the confluence with the Clinch River and Bear Creek from the confluence with Yellow Creek confluence downstream to the Guest River confluence and also includes Glade Creek and Yellow Creek.

City / County: Norton City Scott Co. Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

DEQ AWQM station 6BBER001.14 had a 33% exceedance of the E.coli water quality standard and station 6BGUE000.23 had an 13% exceedance, station 6BGUE006.50 had a 12% exceedance, station 6BGUE013.71 had a 36% exceedance, station 6BGUE026.55 had a 30% exceedance, station 6BGLA000.18 had a 66% exceedance, and station 6BYLO001.50 had a 41% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_BER01A98 / Bear Creek / Bear Creek from Yellow Creek confluence downstream to the Guest River confluence west of Ramsey, WQS Section 2.	4A	Escherichia coli	2010	M	1.94
VAS-P11R_GLA01A14 / Glade Creek / Yellow Creek tributary, Town of Wise, WQS Section 2.	4A	Escherichia coli	2014	M	1.90
VAS-P11R_GUE01A00 / Guest River / Mainstem, from Crab Orchard Branch confluence downstream to confluence with Clinch River near Bangor, WQS Section 2.	4A	Escherichia coli	2004	M	4.15
VAS-P11R_GUE02A98 / Guest River / Mainstem from Bad Branch confluence south of Coeburn downstream to Crab Orchard Branch confluence, WQS Section 2.	4A	Escherichia coli	2006	M	3.09
VAS-P11R_GUE03A06 / Guest River / Mainstem from Sepulcher Creek confluence at Addington (mile 26.21) downstream to the Parson Branch confluence, immediately upstream of the Rt. 23 bridge near Esserville, WQS Section 2.	4A	Escherichia coli	2012	M	2.62
VAS-P11R_GUE03A98 / Guest River / Mainstem from the Parson Branch confluence downstream to the Bad Branch confluence, WQS Section 2.	4A	Escherichia coli	2012	M	16.78
VAS-P11R_GUE04A96 / Guest River / Mainstem from headwaters near Fox Gap downstream to the confluence of Sepulcher Creek at Addington, WQS Section 2.	4A	Escherichia coli	2012	M	8.94
VAS-P11R_SEP01A98 / Sepulcher Creek / Headwaters at Glamorgan to Guest River confluence near Addington, WQS Section 2.	4A	Escherichia coli	2018	M	2.92
VAS-P11R_YLO01A98 / Yellow Creek / Mainstem from headwaters at Berry Chapel, east of Wise, to Bear Creek confluence, WQS Section 2.	4A	Escherichia coli	2014	M	3.16

Guest River and Bear Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**45.50**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_GUE01A00 / Guest River / Mainstem, from Crab	4A	Fecal Coliform	2002	M	4.15

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

Orchard Branch confluence downstream to confluence with Clinch River near Bangor, WQS Section 2.

Guest River and Bear Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**4.15**

Sources:

Rural (Residential Areas)	Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-03-PCB** **Guest River and Bear Creek**

Cause Location: This segment begins at the confluence with Parson's Branch and continues downstream to the confluence with the Clinch River and Bear Creek from the Yellow Creek confluence downstream to the Guest River confluence.

City / County: Norton City Wise Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

Sediment and Fish Tissue stations located at 6BGUE020.37, 6BGUE014.49 and 6BGUE009.33 indicated levels of polychlorinated biphenyls (PCBs) in carp that exceeded DEQ's screening value for PCBs. Sediment and Fish Tissue stations located at 6BGUE001.14 and 6BGUE006.45 found PCB levels that exceeded the Virginia Department of health's level of concern. PCBs were detected in carp and sediment at station 6BBER001.14.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_BER01A98 / Bear Creek / Bear Creek from Yellow Creek confluence downstream to the Guest River confluence west of Ramsey, WQS Section 2.	5A	PCB in Fish Tissue	2004	L	1.94
VAS-P11R_GUE01A00 / Guest River / Mainstem, from Crab Orchard Branch confluence downstream to confluence with Clinch River near Bangor, WQS Section 2.	5A	PCB in Fish Tissue	2004	L	4.15
VAS-P11R_GUE02A98 / Guest River / Mainstem from Bad Branch confluence south of Coeburn downstream to Crab Orchard Branch confluence, WQS Section 2.	5A	PCB in Fish Tissue	2006	L	3.09
VAS-P11R_GUE03A98 / Guest River / Mainstem from the Parson Branch confluence downstream to the Bad Branch confluence, WQS Section 2.	5A	PCB in Fish Tissue	2006	L	16.78

Guest River and Bear Creek **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:			**25.96**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-05-BAC** **Crab Orchard Creek**

Cause Location: This segment extends from the headwaters downstream to the Guest River confluence.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BCRA000.31 had a 40% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_CRA01A98 / Crab Orchard (Branch) Creek / Headwaters south of Little Tom Tunnel to Guest River confluence, south of Crab Orchard, WQS Section 2.	4A	Escherichia coli	2006	L	2.75

Crab Orchard Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**2.75**

Sources:

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-05-BEN** **Eastland Creek**

Cause Location: This segment of Eastland Creek includes from the headwaters downstream to the confluence with Clear Creek.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6BEAS000.07 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_EAS01A06 / Eastland Creek / Clear Creek tributary south of Norton in Jefferson National Forest, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2010	L	2.00

Eastland Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.00**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-06-BAC** **Little Tom's Creek**

Cause Location: This segment includes the headwaters and continues downstream to the Tom's Creek confluence.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BLTF000.68 had a 80% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_LTF01A98 / Little Tom's Creek / From origin on Stone Mountain through Banner to Tom's Creek confluence in Coeburn, WQS Section 2.	4A	Escherichia coli	2006	L	4.79

Little Tom's Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**4.79**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_LTF01A98 / Little Tom's Creek / From origin on Stone Mountain through Banner to Tom's Creek confluence in Coeburn, WQS Section 2.	4A	Fecal Coliform	2004	L	4.79

Little Tom's Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**4.79**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P11R-08-BAC** **Toms Creek**

Cause Location: This segment extends from the headwaters of Toms Creek downstream to the Guest River confluence.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BTMS000.35 had a 63% exceedances of the E.coli water quality standard and station 6BTMS000.60 had a 37% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P11R_TMS01A98 / Toms Creek / Lower mainstem from raw water intake downstream to the Guest River confluence near Riverview, WQS Section 2.	4A	Escherichia coli	2006	L	6.35
VAS-P11R_TMS02A00 / Toms Creek & tributaries / Upper Toms Creek from Coeburn's raw water intake to its headwaters on Sandy Ridge including tributaries, WQS Section 2f.	4A	Escherichia coli	2006	L	6.25

Toms Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**12.60**

Sources:

Rural (Residential Areas) Septage Disposal Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P12R-01-BEN** **Bark Camp Branch**

Cause Location: This segment begins at the headwaters, includes the tributary, and continues downstream to the Stony Creek confluence.

City / County: Scott Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

DEQ biological station 6BBAR000.97 was impaired based on the VSCI score. United States Forest Service (USFS) monitoring station 9150 indicated slight impairment.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P12R_BAR01A02 / Bark Camp Branch & tributaries / Headwaters and tributary from Osborne Rock on Stone Mountain downstream to Stony Creek confluence in Glades Wildlife Management Area, WQS Section 2.	5A	Benthic-Macroinvertebrate Bioassessments	2004	M	3.07

Bark Camp Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.07**

Sources:

Atmospheric Deposition - Acidity

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P12R-01-PH** **Bark Camp Branch**

Cause Location: This segment begins at the headwaters, includes the tributary, and continues downstream to the Stony Creek confluence.

City / County: Scott Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5A

The biological station 6BBAR000.97 found that pH did not meet water quality standards.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P12R_BAR01A02 / Bark Camp Branch & tributaries / Headwaters and tributary from Osborne Rock on Stone Mountain downstream to Stony Creek confluence in Glades Wildlife Management Area, WQS Section 2.	5A	pH	2010	M	3.07

Bark Camp Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			**3.07**

Sources:

Atmospheric Deposition - Acidity

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P12R-02-BEN** **Devil Fork**

Cause Location: This segment begins at the headwaters of Devil Fork and continues downstream to the confluence with Straight Fork.

City / County: Scott Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

DEQ biological station 6BDEV000.07 was impaired based on the VSCI score of 34 and United States Forest Service monitoring station 9131 was also impaired.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P12R_DEV01A02 / Devil's Fork / Devil Fork is a tributary to Straight Fork in Jefferson National Forest, north of Stone Mountain located on the East Stone Gap USGS Quad Map, WQS Section 2, DGIF vi.	5A	Benthic-Macroinvertebrate Bioassessments	2006	M	4.40

Devil Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.40**

Sources:

Atmospheric Deposition - Acidity	Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P12R-02-pH** **Devil Fork**

Cause Location: Devil Fork is a tributary to Straight Fork in Jefferson National Forest, north of Stone Mountain.

City / County: Scott Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5A

The DEQ Biological monitoring station 6BDEV000.07 found that pH did not meet water quality standards.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P12R_DEV01A02 / Devil's Fork / Devil Fork is a tributary to Straight Fork in Jefferson National Forest, north of Stone Mountain located on the East Stone Gap USGS Quad Map, WQS Section 2, DGIF vi.	5A	pH	2014	M	4.40

Devil Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			**4.40**

Sources:

Atmospheric Deposition - Acidity	Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P13R-02-PCB** **Stock Creek**

Cause Location: From stream mile 4.56 downstream to the Clinch River confluence at Clinchport.

City / County: Scott Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

AWQM and sediment/fish tissue station located at 6BSTO004.56 had one fish that exceeded the DEQ screening value for Hg.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P13R_STO01A00 / Stock Creek / From stream mile 4.56, near Sunbright, downstream to the Clinch River confluence at Clinchport, WQS Section 2.	5A	PCB in Fish Tissue	2004	L	4.78

Stock Creek **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:			**4.78**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P13R-03-BAC** **Clinch River, Cove Creek and Stock Creek**

Cause Location: This segment includes the mainstem Clinch River from Copper Creek upstream to the Cove Creek confluence, Lower Cove Creek from its confluence with Millstone Branch to the Clinch River, and Stock Creek from the impoundment east of Sunbright downstream to the Clinch River confluence.

City / County: Scott Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BCOV001.68 had a 25% exceedance of the E.coli standard and station 6BSTO000.45 had a 33% exceedance and station 6BSTO004.56 has a 25% exceedance station 6BCLN202.70 had a 25% exceedance, station 6BCLN206.70 had a 14% exceedance, and station 6BCLN213.02 had a 25% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P13R_CLN01A02 / Clinch River / Mainstem Clinch River from Copper Creek confluence near Speers Ferry downstream to the Tennessee state line near Shelby Creek, WQS Section 2.	4A	Escherichia coli	2008	M	9.63
VAS-P13R_CLN02A02 / Clinch River / Mainstem Clinch River from Copper Creek confluence upstream to Cove Creek confluence near Starnes Slant, WQS Section 2.	4A	Escherichia coli	2014	M	13.01
VAS-P13R_COV01B08 / Cove Creek / Lower Cove Creek from its confluence with Millstone Branch to confluence with Clinch River north of Starnes Slant.	4A	Escherichia coli	2008	M	7.13
VAS-P13R_STO01A00 / Stock Creek / From stream mile 4.56, near Sunbright, downstream to the Clinch River confluence at Clinchport, WQS Section 2.	4A	Escherichia coli	2008	M	4.78
VAS-P13R_STO02A98 / Stock Creek / From the impoundment east of Sunbright downstream to stream mile 4.56, WQS Section 2.	4A	Escherichia coli	2014	M	0.54

Clinch River, Cove Creek and Stock Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**35.09**

Sources:

Sewage Discharges in Unsewered Areas

Source Unknown

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P14R-01-BAC** **Copper Creek, Moll Creek and Valley Creek**

Cause Location: This segment extends from just above Dickensonville downstream to the Obeys Creek confluence, the lower most segment of Valley Creek that confluences with Copper Creek and Moll Creek from the headwaters to the confluence with Copper Creek and tributaries.

City / County: Russell Co. Scott Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BCOP047.75 had a 41% exceedance of the E.coli water quality standard, station 6BCOP052.77 had a 50% exceedance, 6BCOP023.91 had a 16% exceedance, 6BVAL000.25 had a 50% exceedance, 6BMOL000.03 had a 66% exceedance, 6BMOL003.98 had a 83% exceedance of the E. coli water quality standard. Station 6BPTR000.02 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P14R_COP02A02 / Copper Creek / From the Valley Creek confluence upstream to the Grassy Creek confluence, WQS Section 2.	4A	Escherichia coli	2014	M	21.25
VAS-P14R_COP02B08 / Copper Creek / From the Grassy Creek confluence upstream to beginning of WQS Class V waters.	4A	Escherichia coli	2008	M	10.01
VAS-P14R_COP03A02 / Copper Creek / Copper Creek from mile 52.5 through Dickensonville to 56.8, WQS Section 2, vi.	4A	Escherichia coli	2008	M	4.53
VAS-P14R_COP03A08 / Copper Creek / From Valley Creek confluence downstream to Obeys Creek confluence.	4A	Escherichia coli	2014	M	7.71
VAS-P14R_MOL01A08 / Moll Creek & tributaries / From Copper Creek upstream, to second tributary, includes Porter Hollow.	4A	Escherichia coli	2008	M	2.78
VAS-P14R_MOL01B10 / Moll Creek & tributaries / Headwaters and tributaries, WQS Section 2.	4A	Escherichia coli	2014	M	9.61
VAS-P14R_PTR01A14 / Porter Hollow / Moll Creek tributary, WQS Section 2.	4A	Escherichia coli	2014	M	1.84
VAS-P14R_VAL01A02 / Valley Creek, lower / Lower segment, from near Farley Chapel to confluence with Copper Creek, WQS Section 2.	4A	Escherichia coli	2008	M	1.04

Copper Creek, Moll Creek and Valley Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**58.77**

Sources:

Grazing in Riparian or Shoreline Zones — Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P14R-02-BEN** **Blackoak Branch Tributary**

Cause Location: This segment is north of Spivey Mill parallel to Route 665.

City / County: Scott Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6BXGD000.01 was impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P14R_XGD01A12 / Blackoak Branch tributary / North of Manville School flows from Copper Creek Knobs.	5A	Benthic-Macroinvertebrate Bioassessments	2012	M	0.76

Blackoak Branch Tributary	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**0.76**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P15R-00-BAC** **North Fork Clinch River**

Cause Location: This segment includes the upper mainstem from 5 miles above the Duffield raw water intake at Jasper. It also includes from the Fraley Branch confluence and extends downstream to the Tennessee political boundary and includes Drakes Branch, a North Fork Clinch River tributary near Pattonsville.

City / County: Lee Co. Scott Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BNFC010.65 had a 41% exceedance of the E.coli water quality standard, station 6BNFC018.68 had a 33% exceedance, station 6BNFC003.80 had a 41% exceedance, station 6BNFC022.47 had a 18% exceedance, and station 6BDAK001.71 had a 25% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P15R_DAK01A10 / Drakes Branch / A North Fork Clinch tributary, south of Pattonsville, WQS Section 2.	4A	Escherichia coli	2014	M	2.46
VAS-P15R_NFC01A00 / North Fork Clinch River / Upper mainstem from 5 miles above Duffield raw water intake at Jasper, WQS Section 2d.	4A	Escherichia coli	2018	M	4.55
VAS-P15R_NFC01B00 / North Fork Clinch River / Mainstem from Pattonsville Branch confluence downstream to Cox Branch confluence, WQS Section 2.	4A	Escherichia coli	2008	M	7.89
VAS-P15R_NFC01B08 / North Fork Clinch River / Mainstem from Fraley Branch confluence downstream to the Pattonsville Branch confluence.	4A	Escherichia coli	2008	M	3.51
VAS-P15R_NFC01C02 / North Fork Clinch River / Mainstem from the Cox Branch confluence near Fairview downstream to Tennessee state line near Dona, WQS Section 2.	4A	Escherichia coli	2010	M	5.73
VAS-P15R_NFC02A10 / North Fork Clinch River / South of Duffield downstream to Fraley Branch confluence, WQS Section 2.	4A	Escherichia coli	2018	M	2.77

North Fork Clinch River **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**26.91**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P15R_NFC01C02 / North Fork Clinch River / Mainstem from the Cox Branch confluence near Fairview downstream to Tennessee state line near Dona, WQS Section 2.	4A	Fecal Coliform	2002	M	5.73

North Fork Clinch River **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**5.73**

Sources:

Rural (Residential Areas) Sewage Discharges in Unsewered Areas Source Unknown Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P16R-01-BAC** **Blackwater Creek**

Cause Location: This segment includes the Blackwater Creek mainstem from the East Fork Blackwater Creek confluence downstream to the Tennessee political boundary and the East Fork Blackwater Creek mainstem from the Confluence of North Fork Blackwater Creek to the Blackwater Creek confluence.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BBKW005.82 had a 41% exceedance of the E.coli water quality standard. Station 6BBCD001.05 had a 16% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P16R_BCE01A00 / East Fork Blackwater Creek / East Fork Blackwater Creek mainstem from the confluence of North Fork Blackwater Creek to the Blackwater Creek confluence, WQS Section 2.	4A	Escherichia coli	2016	L	1.93
VAS-P16R_BKW01A02 / Blackwater Creek / Blackwater Creek mainstem from East Fork Blackwater Creek confluence downstream to Tennessee state line, WQS Section 2.	4A	Escherichia coli	2008	L	2.09

Blackwater Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.02**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P16R_BKW01A02 / Blackwater Creek / Blackwater Creek mainstem from East Fork Blackwater Creek confluence downstream to Tennessee state line, WQS Section 2.	4A	Fecal Coliform	2004	L	2.09

Blackwater Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**2.09**

Sources:

Septage Disposal Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-00-PH** **Dark Hollow**

Cause Location: This segment is a Powell River tributary south of Appalachia.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5A

The biological monitoring station located at 6BDAR000.26 resulted in low VSCI scores. 2 of 2 pH measurements failed to meet water quality standards.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_DAR01A02 / Dark Hollow / A Powell River tributary south of Appalachia and north of Little Stone Mountain, WQS Section 1.	5A	pH	2012	H	1.40

Dark Hollow	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			**1.40**

Sources:

Atmospheric Deposition - Acidity

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-01-BAC** **Callahan Creek**

Cause Location: This segment includes the mainstem of Callahan Creek from above Appalachia at Possum Trot Hollow downstream to confluence with Preacher Creek.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BCAL003.19 had a 100% exceedance and station 6BCAL001.57 had a 36% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_CAL01A98 / Callahan Creek / Lower mainstem from the Preacher Creek confluence at Andover, downstream to the confluence with Powell River in Appalachia, WQS Section 1.	4A	Escherichia coli	2008	L	1.68
VAS-P17R_CAL01B04 / Callahan Creek / Above Appalachia from Possum Trot Hollow upstream of Stonega downstream to Preacher Creek confluence at Andover, WQS Section 1.	4A	Escherichia coli	2006	L	3.63

Callahan Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**5.31**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_CAL01B04 / Callahan Creek / Above Appalachia from Possum Trot Hollow upstream of Stonega downstream to Preacher Creek confluence at Andover, WQS Section 1.	4A	Fecal Coliform	2004	L	3.63

Callahan Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**3.63**

Sources:

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-01-BEN** **Callahan Creek and Tributaries**

Cause Location: This segment includes the West Fork of Callahan Creek and the lower mainstem of Callahan Creek from the Preacher Creek confluence downstream to the confluence with Powell River, Mud Lick Creek, Halls Branch, and an unnamed tributary to Callahan Creek that flows from Ninemile Spur upstream of Stonega.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A
Total Dissolved Solids / 4A

The biological monitoring station located at 6BCAL000.03 was impaired based on VSCI scores. Non agency biological data from Appalachian Technical Services indicates impairment on West Fork Callahan Creek, Mud Lick Creek, Halls Branch and an unnamed tributary to Callahan Creek.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_CAL01A98 / Callahan Creek / Lower mainstem from the Preacher Creek confluence at Andover, downstream to the confluence with Powell River in Appalachia, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	1.68
VAS-P17R_CAL01B04 / Callahan Creek / Above Appalachia from Possum Trot Hollow upstream of Stonega downstream to Preacher Creek confluence at Andover, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2012	L	3.63
VAS-P17R_CAL01C14 / Callahan Creek / Origin is near Stonega Gap on Black Mountain, upstream of coal company guard shack, access limited, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	3.80
VAS-P17R_CLA01A14 / West Fork Callahan Creek / Bluff Spur drainage, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	2.53
VAS-P17R_HLS01A14 / Halls Branch / A tributary to Mud Lick Creek from Bluff Spur, north of Osaka, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.93
VAS-P17R_MIK01A06 / Mud Lick Creek / From Roda to confluence with Callahan Creek near Osaka, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	2.90
VAS-P17R_MIK02A14 / Mud Lick Creek / Sawmill Hollow, upstream of Roda, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	3.13

Callahan Creek and Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**19.60**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_CAL01A98 / Callahan Creek / Lower mainstem from the Preacher Creek confluence at Andover, downstream to the confluence with Powell River in Appalachia, WQS Section 1.	4A	Sedimentation/Siltation	2010	L	1.68
VAS-P17R_CAL01B04 / Callahan Creek / Above Appalachia from Possum Trot Hollow upstream of Stonega downstream to Preacher Creek confluence at Andover, WQS Section 1.	4A	Sedimentation/Siltation	2012	L	3.63

Callahan Creek and Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Sedimentation/Siltation - Total Impaired Size by Water Type:			**5.31**

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_CAL01A98 / Callahan Creek / Lower mainstem from the Preacher Creek confluence at Andover, downstream to the confluence with Powell River in Appalachia, WQS Section 1.	4A	Total Dissolved Solids	2010	L	1.68
VAS-P17R_CAL01B04 / Callahan Creek / Above Appalachia from Possum Trot Hollow upstream of Stonega downstream to Preacher Creek confluence at Andover, WQS Section 1.	4A	Total Dissolved Solids	2012	L	3.63

Callahan Creek and Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Total Dissolved Solids - Total Impaired Size by Water Type:			**5.31**

Sources:

Coal Mining	Sewage Discharges in Unsewered Areas	Silviculture Activities	Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-02-BAC** **Powell River**

Cause Location: This segment begins at the Benges Branch confluence and continues downstream to Roaring Fork and includes the mainstem from Pigeon Creek downstream to Dakota Street in Big Stone Gap, river mile 177.53.

City / County: Norton City Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6BPOW180.62 had a 58% exceedance, 6BPOW179.20 had a 47% exceedance of the E.coli water quality standard and 6BPOW193.38 had a 75% exceedance of the bacteria water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_POW01A94 / Powell River / Powell River from Roaring Branch confluence, 180.83, downstream to South Fork Powell River confluence in the Town of Big Stone Gap, river mile 177.53, WQS Section 1.	4A	Escherichia coli	2006	L	2.71
VAS-P17R_POW01B02 / Powell River / Mainstem Powell River from Benges Branch confluence upstream of Josephine downstream to Roaring Fork confluence at Kent Junction, WQS Section 1.	4A	Escherichia coli	2010	L	5.46
VAS-P17R_POW02C06 / Powell River / The mainstem of Powell River south of Appalachia from Pigeon Creek confluence to Roaring Creek confluence, WQS Section 1.	4A	Escherichia coli	2008	L	1.00

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**9.17**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_POW01B02 / Powell River / Mainstem Powell River from Benges Branch confluence upstream of Josephine downstream to Roaring Fork confluence at Kent Junction, WQS Section 1.	4A	Fecal Coliform	2006	L	5.46

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**5.46**

Sources:

Agriculture	Sanitary Sewer Overflows (Collection System Failures)	Sewage Discharges in Unsewered Areas	Wastes from Pets

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-02-BEN** **Powell River**

Cause Location: These segments include the headwaters of the mainstem of the Powell River, south of Divides Ridge to the Benges Branch confluence; the mainstem at Appalachia, from the Pigeon Creek confluence to the Roaring Creek confluence; and the Powell River from the Roaring Branch confluence downstream to the South Fork Powell River confluence.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological monitoring stations located at 6BPOW179.20, 6BPOW184.19 and 6BRIN001.84 were impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_POW01A94 / Powell River / Powell River from Roaring Branch confluence, 180.83, downstream to South Fork Powell River confluence in the Town of Big Stone Gap, river mile 177.53, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	2.71
VAS-P17R_POW01C02 / Powell River / Powell River, from the Benges Branch confluence upstream to the Buckeye Branch confluence, north of Rogers Ridge, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	9.02
VAS-P17R_POW02B06 / Powell River / Mainstem at Appalachia, from Pigeon Creek confluence upstream to Roaring Fork confluence at Kent Junction, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2010	L	5.70
VAS-P17R_POW03C14 / Powell River / Headwaters of the mainstem, south of Divides Ridge, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.57

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**19.00**

Sources:

Agriculture	Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Mountaintop Mining
Non-Point Source	Rural (Residential Areas)	Silviculture Activities	Streambank Modifications/destabilization
Surface Mining			

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-03-BEN** **Black Creek**

Cause Location: This segment includes Black Creek and its tributaries from the impoundment downstream to the Powell River confluence.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Alkalinity, Carbonate as CaCO3 / 4A
Benthic-Macroinvertebrate Bioassessments / 4A
Manganese / 4A

The segment is impaired based on the VSCI scores of 48.22 and 54.18 at station 6BBLK000.13.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_BLK01A96 / Black Creek / Black Creek and tributaries from impoundment downstream to the Powell River confluence north of Blackwood, WQS Section 1.	4A	Alkalinity, Carbonate as CaCO3	2010	L	3.11

Black Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Alkalinity, Carbonate as CaCO3 - Total Impaired Size by Water Type:			**3.11**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_BLK01A96 / Black Creek / Black Creek and tributaries from impoundment downstream to the Powell River confluence north of Blackwood, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	3.11

Black Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.11**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_BLK01A96 / Black Creek / Black Creek and tributaries from impoundment downstream to the Powell River confluence north of Blackwood, WQS Section 1.	4A	Manganese	2002	L	3.11

Black Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Manganese - Total Impaired Size by Water Type:			**3.11**

Sources:

Coal Mining	Coal Mining Discharges (Permitted)	Impacts from Abandoned Mine Lands (Inactive)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-04-BEN** **Unnamed tributary to Callahan Creek**

Cause Location: Flows from Ninemile Spur upstream of Stonega, WQS Section 1.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_XHO01A14 / Unnamed tributary to Callahan Creek. / Flows from Ninemile Spur upstream of Stonega, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2016	L	0.58

Unnamed tributary to Callahan Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**0.58**

Sources:

Unspecified Land Disturbance

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-07-BEN** **Pigeon Creek**

Cause Location: This segment includes the headwaters of Pigeon Creek from Black Mtn, the KY line, through the Exeter community downstream to the Laurel Creek confluence.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Biological monitoring stations located at 6BPIG003.55 AND 6BPIG005.20 were impaired based on the VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_PIG01B12 / Pigeon Creek / Headwaters from Little Black Mountain, the KY line, through the Exeter community downstream to the Laurel Fork confluence, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2012	H	3.42

Pigeon Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.42**

Sources:

Coal Mining Rural (Residential Areas) Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-09-BEN** **Roaring Fork and Potcamp Fork**

Cause Location: This segment includes from the headwaters above the Roaring Fork community to the Powell River confluence at Kent Junction, parallel to Route 603, including Potcamp Fork and Canepatch Creek.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station located at 6BRIN001.84 was impaired based on VSCI scores of 49.15 and 27.84 and non agency biological monitoring data provided by Appalachian Technical Services indicates impairment on Potcamp Fork and Canepatch Creek.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_CPH01A14 / Canepatch Creek / Roaring Fork tributary from Rogers Ridge, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	H	8.72
VAS-P17R_POT01A14 / Potcamp Fork / A Roaring Fork tributary, segment is from headwaters downstream to Dunbar, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	H	2.86
VAS-P17R_RIN01A00 / Roaring Fork / Lower mainstem from Roaring Fork community to the Powell River confluence at Kent Junction, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2010	H	5.04
VAS-P17R_RIN01B14 / Roaring Fork / Headwaters on Black Mountain downstream to the Roaring Fork community, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	H	10.15

Roaring Fork and Potcamp Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**26.77**

Sources:

Coal Mining Mountaintop Mining Silviculture Harvesting Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-11-BEN** **Powell River**

Cause Location: This segment includes the mainstem Powell River from the Benges Branch confluence upstream of Josephine downstream to the Roaring Fork confluence and from the Benges Branch confluence upstream to the Buckeye Branch confluence.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicates impaired VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_POW01B02 / Powell River / Mainstem Powell River from Benges Branch confluence upstream of Josephine downstream to Roaring Fork confluence at Kent Junction, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	L	5.46

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**5.46**

Sources:

Mountaintop Mining Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-12-BEN** **Powell River**

Cause Location: This segment includes the mainstem of the Powell River south of Appalachia from Pigeon Creek to the Roaring Creek confluence

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_POW02C06 / Powell River / The mainstem of Powell River south of Appalachia from Pigeon Creek confluence to Roaring Creek confluence, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2010	L	1.00

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**1.00**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-13-BEN** **Looney Creek**

Cause Location: This segment is a Powell River tributary west of Appalachia.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_LOC01A12 / Looney Creek / Powell River tributary west of Appalachia	5A	Benthic-Macroinvertebrate Bioassessments	2014	H	6.04
VAS-P17R_PIG01A06 / Pigeon Creek / From Laurel Fork confluence to confluence with Powell River south of Appalachia, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	H	2.50

Looney Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**8.54**

Sources:

Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P17R-14-PH** **Roaring Branch**

Cause Location: North of Big Stone Gap from the headwaters near High Butte downstream to the confluence with the Powell River in Big Stone Gap, WQS Section 1.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5A

72% of pH measurements failed to meet WQS at 6BRNN000.07.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P17R_RRN01A00 / Roaring Branch / North of Big Stone Gap from headwaters near High Butte downstream to the confluence with Powell River in Big Stone Gap, WQS Section 1.	5A	pH	2018	L	2.91

Roaring Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			**2.91**

Sources:

Atmospheric Deposition - Acidity

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18L-01-HG** **Big Cherry Reservoir**

Cause Location: This reservoir is located east of East Stone Gap on Powell Mountain.

City / County: Wise Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Two largemouth bass samples exceeded the Virginia Department of Health's level of concern for Mercury.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18L_PLL01L02 / Big Cherry Reservoir / East of East Stone Gap on Powell Mountain in WQS Section 1c.	5A	Mercury in Fish Tissue	2010	L	104.00

Big Cherry Reservoir **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**104.00**	

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18L-01-PH** **Big Cherry Reservoir**

Cause Location: This reservoir is located east of East Stone Gap on Powell Mountain.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5C

Category 5C: Monitoring station 6BPLL012.79 had a 61% exceedance of the pH water quality criteria and station 6BPLL012.99 had a 79% exceedance of the pH criteria.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18L_PLL01L02 / Big Cherry Reservoir / East of East Stone Gap on Powell Mountain in WQS Section 1c.	5C	pH	2002	M	104.00

Big Cherry Reservoir	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:		**104.00**	

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18R-01-BAC** **South Fork Powell River**

Cause Location: This segment begins at the Big Cherry Reservoir and continues downstream to the confluence with the Powell River.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM station located at 6BPLL006.38 had a 33% exceedance of the bacteria water quality standard, station 6BPLL004.24 had a 50% exceedance of the E.coli water quality standard, station 6BPLL002.55 had a 33% exceedance and station 6BPLL000.27 had a 22% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_PLL02A00 / South Fork Powell River / From Big Cherry Reservoir dam on Little Mountain downstream to Beaverdam Creek confluence southeast of East Stone Gap, WQS Section 1.	4A	Escherichia coli	2012	L	6.45

South Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**6.45**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_PLL02A00 / South Fork Powell River / From Big Cherry Reservoir dam on Little Mountain downstream to Beaverdam Creek confluence southeast of East Stone Gap, WQS Section 1.	4A	Fecal Coliform	2004	L	6.45

South Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**6.45**

Sources:

- Sewage Discharges in Unsewered Areas
- Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18R-01-BEN** **South Fork Powell River**

Cause Location: This segment includes the mainstem, from Butcher Fork confluence downstream to confluence with Powell River in Big Stone Gap.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

Biological monitoring stations 6BPLL002.55 and 6BPLL004.40 were impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_PLL01A02 / South Fork Powell River / Mainstem from confluence of Beaverdam Creek downstream to Butcher Fork confluence at East Stone Gap, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	1.97
VAS-P18R_PLL01A98 / South Fork Powell River / Mainstem from Butcher Fork confluence north of East Stone Gap downstream to confluence with Powell River at Three Forks in Big Stone Gap, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	3.83

South Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**5.80**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_PLL01A02 / South Fork Powell River / Mainstem from confluence of Beaverdam Creek downstream to Butcher Fork confluence at East Stone Gap, WQS Section 1.	4A	Sedimentation/Siltation	2012	L	1.97
VAS-P18R_PLL01A98 / South Fork Powell River / Mainstem from Butcher Fork confluence north of East Stone Gap downstream to confluence with Powell River at Three Forks in Big Stone Gap, WQS Section 1.	4A	Sedimentation/Siltation	2012	L	3.83

South Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**5.80**

Sources:

Loss of Riparian Habitat

Sewage Discharges in Unsewered Areas

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18R-01-PH** **South Fork Powell River**

Cause Location: Mainstem from the Butcher Fork confluence north of East Stone Gap downstream to the confluence with the Powell River at Three Forks in Big Stone Gap.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: pH / 5A

The AWQM station located at 6BPLL001.61 had a 13% exceedance of the pH water quality criterion.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_PLL01A98 / South Fork Powell River / Mainstem from Butcher Fork confluence north of East Stone Gap downstream to confluence with Powell River at Three Forks in Big Stone Gap, WQS Section 1.	5A	pH	2016	L	3.83

South Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			**3.83**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18R-02-BAC** **Butcher Fork**

Cause Location: This segment includes the headwaters downstream to the South Fork Powell River confluence.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

AWQM station located at 6BBUH000.76 had a 22% exceedance of the bacteria water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_BUH01A04 / Butcher Fork / From headwaters north of Buffalo Gap downstream to confluence with South Fork Powell River south of Big Stone Gap, WQS Section 1.	4A	Escherichia coli	2012	L	4.96

Butcher Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**4.96**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_BUH01A04 / Butcher Fork / From headwaters north of Buffalo Gap downstream to confluence with South Fork Powell River south of Big Stone Gap, WQS Section 1.	4A	Fecal Coliform	2004	L	4.96

Butcher Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**4.96**

Sources:

Sewage Discharges in Unsewered Areas

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18R-03-BAC** **South Fork Powell River**

Cause Location: This segment includes the mainstem from the confluence of Beaverdam Creek, north of East Stone Gap, downstream to the confluence with the Powell River at Three Forks in Big Stone Gap.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

AWQM station at 6BPLL000.27 had a 22% exceedance and station 6BPLL001.61 had a 42% exceedance of the E. coli water quality standard, station 6BPLL002.55 has a 33% exceedance of the E. coli water quality standard. AWQM station 6BPLL004.24 had a 50% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_PLL01A02 / South Fork Powell River / Mainstem from confluence of Beaverdam Creek downstream to Butcher Fork confluence at East Stone Gap, WQS Section 1.	4A	Escherichia coli	2010	L	1.97
VAS-P18R_PLL01A98 / South Fork Powell River / Mainstem from Butcher Fork confluence north of East Stone Gap downstream to confluence with Powell River at Three Forks in Big Stone Gap, WQS Section 1.	4A	Escherichia coli	2010	L	3.83

South Fork Powell River **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**5.80**

Sources:

- Sewage Discharges in Unsewered Areas
- Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P18R-04-BAC** **Beaverdam Creek**

Cause Location: A South Fork Powell River tributary east of East Stone Gap, from the headwaters near Buffalo Gap downstream, WQS Section 1.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6BBEV000.17 had a 41% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P18R_BEV01A10 / Beaverdam Creek / A South Fork Powell River tributary, east of East Stone Gap, from headwaters near Buffalo Gap, downstream, WQS Section 1.	5A	Escherichia coli	2018	L	4.03

Beaverdam Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**4.03**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P19R-01-BAC** **Mud Creek**

Cause Location: This segment includes the mainstem from the Highway 58 crossing downstream to the Powell River confluence.

City / County: Lee Co. Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

AWQM station located at 6BMDC000.33 had a 25% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P19R_MDC01A10 / Mud Creek / A Powell River tributary from Hwy 58 crossing to Powell River, east of Olinger, WQS Section 1.	4A	Escherichia coli	2010	M	1.81

Mud Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**1.81**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P19R-01-BEN** **Powell River**

Cause Location: This segment extends from confluence of Poor Valley Creek downstream to the Public Water Supply segment.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

The biological station located at 6BPOW166.97 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P19R_POW03A00 / Powell River / Near Dryden from confluence of Poor Valley Creek downstream to PWS segment in WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	6.62

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**6.62**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P19R_POW03A00 / Powell River / Near Dryden from confluence of Poor Valley Creek downstream to PWS segment in WQS Section 1.	4A	Sedimentation/Siltation	2012	L	6.62

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**6.62**

Sources:

Agriculture

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P19R-02-BEN** **Poor Valley Creek**

Cause Location: This segment includes the headwaters of Poor Valley Creek downstream to its confluence with the Powell River.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4C

This segment was miss-categorized in 2004. USFS monitored site 9120 and found a moderate impairment due to drought conditions.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P19R_PVC01A02 / Poor Valley Creek / Powell River tributary north of Dryden, from headwaters near Dalton Gap, WQS Section 1.	4C	Benthic-Macroinvertebrate Bioassessments			2.82

Poor Valley Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.82**

Sources:

Drought-related Impacts	Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20L-01-HG** **Lake Keokee**

Cause Location: This lake is located south of Exeter on Stone Mountain.

City / County: Lee Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

A largemouth bass sample exceeded the Virginia Department of Health level of concern for Mercury and one fish tissue sampled exceeded the Department of Environmental Quality's screening value for Mercury.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20L_PWL01L02 / Lake Keokee / This recreation impoundment was constructed in 1975, South of Exeter on Stone Mountain WQS Section 1.	5A	Mercury in Fish Tissue	2010	L	96.21

Lake Keokee **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**96.21**	

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-00-BEN** **Straight Creek and Tributaries**

Cause Location: This segment includes not only the headwaters of Straight Creek downstream to the North Fork Powell confluence but also its tributaries including Bailey's Trace, Ely Creek, Lick Branch, and Puckett Creek.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The following DEQ biological stations were found to be moderately impaired: 6BSTA000.11, 6BSTA000.40, 6BSTA000.54, 6BSTA001.10, 6BSTA002.48, 6BSTA003.62, 6BSTC000.06, 6BSTC000.27 and 6BSTC003.27. A special study contracted by the Division o f Mine Land Reclamation and the united States Corp of Engineers verified the benthic impairments of Lick Branch and Ely Creek.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_BAI01A00 / Bailey's Trace & tributaries / Headwaters on Black Mountain downstream to Straight Creek confluence near St Charles, including Fawn Branch in WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	4.69
VAS-P20R_ELC01A00 / Ely Creek & tributaries / Ely Creek and tributaries downstream to the confluence with Stone Creek in WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	3.28
VAS-P20R_LCK01A00 / Lick Branch / Headwaters downstream to Puckett Creek confluence, WQS, Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	0.74
VAS-P20R_PCK01A00 / Puckett Creek & tributaries / A Straight Creek tributary from headwaters to mouth at Maness, including tributaries, west of St. Charles in WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	5.37
VAS-P20R_SRA01A94 / Straight Creek / From headwaters on Little Black Mountain downstream to North Fork Powell confluence near Pockett in WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	6.81
VAS-P20R_STC02A00 / Stone Creek & tributaries / Headwaters and tributaries downstream to the Ely Creek confluence, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	7.21

Straight Creek and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**28.10**

Sources:

- Acid Mine Drainage
- Coal Mining
- Impacts from Abandoned Mine Lands (Inactive)
- Sewage Discharges in Unsewered Areas
- Silviculture Activities

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-01-BAC** **North Fork Powell River**

Cause Location: This segment extends from the Straight Creek confluence, river mile 6.25, downstream to the Powell River confluence.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BPWL001.49 had a 27% exceedance of the E.coli water quality standard and station 6BPWLL004.10 had a 45% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_PWL01A00 / North Fork Powell River / From Straight Creek confluence near Pocket, river mile 6.25, through Pennington Gap, downstream to Powell River confluence west of Woodway, WQS Section 1.	4A	Escherichia coli	2004	L	6.05

North Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**6.05**

Sources:

Septage Disposal

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-01-BEN** **North Fork Powell River**

Cause Location: This segment extends form the Straight Creek confluence at river mile 6.25, downstream to the Powell River confluence.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A

Biological monitoring stations 6BPWL004.40 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_PWL01A00 / North Fork Powell River / From Straight Creek confluence near Pocket, river mile 6.25, through Pennington Gap, downstream to Powell River confluence west of Woodway, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	1994	L	6.05

North Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**6.05**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_PWL01A00 / North Fork Powell River / From Straight Creek confluence near Pocket, river mile 6.25, through Pennington Gap, downstream to Powell River confluence west of Woodway, WQS Section 1.	4A	Sedimentation/Siltation	2012	L	6.05

North Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Sedimentation/Siltation - Total Impaired Size by Water Type:			**6.05**

Sources:

Loss of Riparian Habitat	Streambank Modifications/destabilization

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-01-TEMP** **North Fork Powell River**

Cause Location: This segment includes the mainstem from the Payne Branch confluence at Sigma downstream to the confluence with Straight Creek.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5A

Class V water quality standard for temperature was exceeded in 36% of the samples at the AWQM station located at 6BPWL006.59. Station 6BPWL010.36 had a 22% exceedance of the Class V water quality standard for temperature.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_PWL02A02 / North Fork Powell River / Mainstem from Payne Branch confluence at Sigma downstream to Wolf Harbor Branch confluence, WQS Section 1.	5A	Temperature, water	2016	M	7.67
VAS-P20R_PWL03B02 / North Fork Powell River / Mainstem from Wolf Harbour Branch confluence downstream to confluence of Straight Creek near Pocket, WQS Section 1.	5A	Temperature, water	2014	M	2.98

North Fork Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:			**10.65**

Sources:

Silviculture Activities Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-02-BAC** **Straight Creek and Tributaries**

Cause Location: This segment includes Stone Creek from the confluence of Ely Creek to the Straight Creek confluence at the Stone Creek community and also includes Straight Creek from the headwaters downstream to the North Fork Powell confluence.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BSR001.11 had a 30% exceedance of the E.coli water quality standard. At 6BSRA000.10 63% exceeded WQS. Station 6BSTC000.04 had a 67% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_SRA01A94 / Straight Creek / From headwaters on Little Black Mountain downstream to North Fork Powell confluence near Pockett in WQS Section 1.	4A	Escherichia coli	2002	L	6.81
VAS-P20R_STC01A96 / Stone Creek & tributaries / From the confluence of Ely Creek to the Straight Creek confluence at the Stone Creek community, parallels Rt. 421, WQS Section 1.	4A	Escherichia coli	2016	L	3.33

Straight Creek and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**10.14**

Sources:

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-03-BAC** **Reeds Creek**

Cause Location: This segment includes Reeds Creek from the Meadow Fork confluence downstream to the Jones Creek confluence parallel to Route 628.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BREE000.22 had a 27% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_REE01A12 / Reeds Creek / Lone Mountain drainage, from Meadow Fork confluence downstream to confluence with North Fork Powell River at Purcell.	4A	Escherichia coli	2012	M	1.35

Reeds Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**1.35**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P20R-04-BEN** **North Fork Powell River Tributaries**

Cause Location: These segments include the headwaters of Bundy Creek at Calvin; Cox Creek near Delvale; and Jones Creek from the headwaters at Trace Gap to the confluence with Reeds Creek, northeast of Purcell

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P20R_BUY01B14 / Bundy Creek / Headwaters, at Calvin, of a North Fork Powell River tributary, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.53
VAS-P20R_CXR01A14 / Cox Creek / Confluences with North Fork Powell River near Delvale, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.89
VAS-P20R_JON01A12 / Jones Creek / From Mud Creek confluence downstream to the confluence with Reeds Creek, Northeast of Purcell	5A	Benthic-Macroinvertebrate Bioassessments	2014	L	2.93
VAS-P20R_JON01A14 / Jones Creek / Headwaters at Trace Gap down to the Mud Creek confluence, WQS Section 1.	5A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.88

North Fork Powell River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**8.23**

Sources:

Silviculture Activities Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P21R-02-BAC** **Hardy Creek**

Cause Location: This segment includes the Hardy Creek mainstem and its tributaries.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6BHAR000.34 had a 27% exceedance and station 6BHAR002.41 has a 33% exceedance of the bacteria water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P21R_HAR01A02 / Hardy Creek & tributaries / Hardy Creek & tributaries from headwaters near Hagan downstream to Powell River confluence near White Shoals, WQS Section 1, DGIF vi.	5A	Escherichia coli	2006	M	12.52

Hardy Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**12.52**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P21R-03-BAC** **Powell River and Town Creek**

Cause Location: This segment includes the mainstem of Town Creek, just south of Jonesville to the confluence with Batie Creek. It also includes the Powell River from the confluence of Station Creek downstream to the confluence of Batie Creek, south of Jonesville.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Escherichia coli / 5A

The AWQM station located at 6BTOW001.32 had a 8% exceedance, station 6BTOW003.82 had a 63% exceedance and station 6BPOW138.91 had a 11% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P21R_POW02A02 / Powell River / Powell River from the confluence of Station Creek downstream to the confluence of Batie Creek south of Jonesville, WQS Section 1.	4A	Escherichia coli	2006	L	12.74
VAS-P21R_TOW01A06 / Town Creek / A Batie Creek tributary south of Jonesville, WQS Section 1.	5A	Escherichia coli	2006	M	2.69
VAS-P21R_TOW01B12 / Town Creek / Originates on Chestnut Ridge, flows south, then west, draining the Town of Jonesville	5A	Escherichia coli	2012	M	3.73

Powell River and Town Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**19.16**

Sources:

Rural (Residential Areas)

Sewage Discharges in Unsewered Areas

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P21R-03-BEN** **Powell River**

Cause Location: This segment includes the mainstem of the Powell River from the confluence of North Fork Powell River downstream to the Town Creek confluence.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Probabilistic biological monitoring station 6BPOW156.57 was impaired based on VSCI scores of 50 and 57.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P21R_POW02A02 / Powell River / Powell River from the confluence of Station Creek downstream to the confluence of Batie Creek south of Jonesville, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2012	L	12.74
VAS-P21R_POW03A02 / Powell River / Mainstem Powell River from the confluence of North Fork Powell River west of Woodway downstream to Station Creek confluence near Poteet Ferry Bridge, WQS Section 1.	4A	Benthic-Macroinvertebrate Bioassessments	2008	L	6.46

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**19.20**

Sources:

Agriculture	Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P21R-04-BAC** **Dry Creek**

Cause Location: From the Trading Creek confluence, along Route 656, downstream to the confluence with Hardy Creek near Route 650.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6BDBR001.69 had a 18% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P21R_DBR01A02 / Dry Creek / North of The Cedars, Dry Creek is a tributary to Hardy Creek arising south of Cumberland Mountain in Poor Valley, WQS Section 1, DGIF vi.	5A	Escherichia coli	2012	M	8.87

Dry Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**8.87**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P21R-06-BAC** **Station Creek**

Cause Location: This segment is located north of Wallen Ridge, parallel to U.S. 58, to the confluence with the Powell River at the Poteet Ferry Bridge.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6BSTN000.14 has a 45% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P21R_STN01A12 / Station Creek / A Powell River tributary that confluences at Poteet Ferry Bridge, north of Wallen Ridge.	4A	Escherichia coli	2012	M	2.31

Station Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**2.31**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P22R-01-BAC** **Wallen Creek**

Cause Location: This segment includes from the headwaters on Powell Mountain downstream, parallel to Route 612, to the Route 70 crossing.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

Station 6BWAL014.54 had a 27% exceedance of the E.coli water quality standard and station 6BWAL026.64 had a 36% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P22R_WAL02A02 / Wallen Creek, headwaters and tributaries / Upper Wallen Creek segment from headwaters on Powell Mountain downstream to Rasnic Hollow, WQS Section 1, DGIF vi., WQS Section 1, DGIF vi.	4A	Escherichia coli	2012	M	29.71
VAS-P22R_WAL02B02 / Wallen Creek / Middle Wallen Creek segment from Rasnic Hollow downstream to Route 70 crossing south of Wallen Ridge, WQS Section 1, DGIF vi.	4A	Escherichia coli	2012	M	13.19

Wallen Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**42.90**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P22R-01-TEMP** **Wallen Creek**

Cause Location: North of Powell Mountain, from headwaters through Stickleyville, downstream to Rasnic Hollow.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5A

Class V water quality standard for temperature was exceeded in 18% of the samples at the AWQM stations located at 6BWAL026.64 and 6BWAL014.54.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P22R_WAL02A02 / Wallen Creek, headwaters and tributaries / Upper Wallen Creek segment from headwaters on Powell Mountain downstream to Rasnic Hollow, WQS Section 1, DGIF vi., WQS Section 1, DGIF vi.	5A	Temperature, water	2012	M	29.71
VAS-P22R_WAL02B02 / Wallen Creek / Middle Wallen Creek segment from Rasnic Hollow downstream to Route 70 crossing south of Wallen Ridge, WQS Section 1, DGIF vi.	5A	Temperature, water	2012	M	13.19

Wallen Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Temperature, water - Total Impaired Size by Water Type:			**42.90**

Sources:

Grazing in Riparian or Shoreline Zones

Loss of Riparian Habitat

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P23R-02-BAC** **Martin Creek**

Cause Location: This segment includes the headwaters and extends downstream to the Tennessee political boundary.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6BMTN003.56 had a 45% exceedance and station 6BMTN003.94 had a 50% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P23R_MTN01A00 / Martin Creek / Mainstem; from headwaters near Rose Hill, downstream to Tennessee state line, WQS Section 1, DGIF vi.	5A	Escherichia coli	2008	M	9.66

Martin Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**9.66**

Sources:

- Sewage Discharges in Unsewered Areas
- Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P23R-03-BAC** **Fourmile Creek**

Cause Location: This segment includes from the headwaters, south of Ingles Chapel, parallel to Route 744 and flows south into Tennessee.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6BFOU003.59 had a 50% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P23R_FOU01A14 / Fourmile Creek / South of Ewing, flows south into TN, WQS Section 1.	5A	Escherichia coli	2014	M	2.36

Fourmile Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**2.36**

Sources:

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P24R-01-BAC** **Indian Creek**

Cause Location: This segment includes the mainstem from the confluence of Machine Branch downstream to the Tennessee political boundary and the mainstem from Ketron Mill to just south of Elydale School

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6BIND009.12 had a 50% exceedance and station 6BIND010.25 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P24R_IND01A00 / Indian Creek / Mainstem from the confluence of Machine Branch downstream to the Tennessee state line, near Gibson Station, WQS Section 1.	5A	Escherichia coli	2008	M	8.18
VAS-P24R_IND02A14 / Indian Creek / Indian Creek mainstem from the Meek Branch confluence, near Caylor, downstream to the confluence of Machine Branch, near Elydale, WQS Section 1.	5A	Escherichia coli	2014	M	4.44

Indian Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**12.62**

Sources:

Sewage Discharges in Unsewered Areas

Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* P24R-02-BAC** **Station Creek**

Cause Location: From Gibson Gap on Cumberland Mountain in Cumberland Gap National Park to the TN line.

City / County: Lee Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

33% of samples collected by the National Park Service exceeded the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-P24R_STT01A14 / Station Creek / From Gibson Gap on Cumberland Mountain, in Cumberland Gap National Park, to TN line, WQS Section 1.	5A	Escherichia coli	2018	L	3.11

Station Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**3.11**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q01R-01-BAC** **Dry Fork**

Cause Location: This segment includes from the headwaters in upper Baptist Valley to the West Virginia state line near SR 637.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6ADRK035.86 had a 45% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q01R_DRK01A98 / Dry Fork / Mainstem from headwaters in upper Baptist Valley to West Virginia state line near SR 637, WQS Section 2.	5A	Escherichia coli	2018	L	11.61

Dry Fork **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**11.61**

Sources:

Source Unknown	Unspecified Domestic Waste

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q01R-02-BAC** **Jacobs Fork and Tributaries**

Cause Location: At the West Virginia state line; Jacobs Fork and Brewster Hollow, east and south of Bishop.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

AQWM station 6AJBF010.88 had a 91% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q01R_JBF01A10 / Jacobs Fork & tributaries / At West Virginia state line; Jacobs Fork and Brewster Hollow East and South of Bishop, WQS Section 3.	5A	Escherichia coli	2010	M	2.34

Jacobs Fork and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**2.34**

Sources:

Rural (Residential Areas)	Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q03R-01-BEN** **Pawpaw Creek**

Cause Location: This segment includes the mainstem from the Kentucky state line downstream to the Knox Creek confluence, along State Route 643.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological station located at 6APPW000.50 was impaired based on VSCI scores of 50, 36 and 57 in 2005 and 2006.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q03R_PPW01A94 / Pawpaw Creek / From Kentucky state line near Pawpaw downstream through Kelsa to Knox Creek confluence, along SR 643 in WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	1994	L	4.23

Pawpaw Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.23**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Silviculture Activities

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q03R-02-BAC** **Knox Creek**

Cause Location: This segment includes the mainstem from the headwaters to the Kentucky political boundary.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6AKOX017.71 had a 33% exceedance of the E.coli water quality standard, 6AKOX014.17 had a 33% exceedance of the E.coli water quality standard and station 6AKOX006.52 had a 27% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q03R_GIE01A04 / Guess Fork / Knox Creek tributary from State Line Ridge, north of Hurley, found on Panther and Hurley quad sheets in WQS Section 3.	4A	Escherichia coli	2010	L	8.70
VAS-Q03R_KOX01A00 / Knox Creek / Mainstem from Straight Fork confluence at Blackey upstream to the headwaters near Paynesville, West Virginia, WQS Section 3.	4A	Escherichia coli	2006	L	7.75
VAS-Q03R_KOX02A98 / Knox Creek / Mainstem from Kentucky state line upstream through Hurley to the Straight Fork confluence at Blackey, WQS Section 3.	4A	Escherichia coli	2002	L	9.53

Knox Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**25.98**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q03R_GIE01A04 / Guess Fork / Knox Creek tributary from State Line Ridge, north of Hurley, found on Panther and Hurley quad sheets in WQS Section 3.	4A	Fecal Coliform	2004	L	8.70
VAS-Q03R_KOX01A00 / Knox Creek / Mainstem from Straight Fork confluence at Blackey upstream to the headwaters near Paynesville, West Virginia, WQS Section 3.	4A	Fecal Coliform	2002	L	7.75

Knox Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**16.45**

Sources:

Rural (Residential Areas)	Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q03R-02-BEN** **Knox Creek**

Cause Location: This segment includes the mainstem from the headwaters to the Kentucky political boundary.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological station located at 6AKOX011.67 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q03R_KOX01A00 / Knox Creek / Mainstem from Straight Fork confluence at Blackey upstream to the headwaters near Paynesville, West Virginia, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	7.75
VAS-Q03R_KOX02A98 / Knox Creek / Mainstem from Kentucky state line upstream through Hurley to the Straight Fork confluence at Blackey, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	9.53

Knox Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**17.28**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Mountaintop Mining	Silviculture Activities
Surface Mining			

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q03R-02-PCB** **Knox Creek and Tributaries**

Cause Location: This segment includes the mainstem from the headwaters to the Kentucky political boundary. It also includes all tributaries to Knox Creek that were included in the December 2005 Virginia Department of Health (VDH) Fish Consumption Ban update including Guess Fork, Big Butt Branch and tributaries, Long Bottom Branch and Pawpaw Creek.

City / County: Buchanan Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 5A

Fish Tissue stations located at 6AKOX023.25, 6AKOX020.36, 6AKOX019.30, 6AKOX017.97, 6AKOX014.37, 6AKOX012.06, 6AKOX010.98, 6AKOX008.14 indicated an exceedance of the DEQ screening value for polychlorinated biphenyls (PCBs) and the VDH human health criteria for PCBs.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q03R_BBB01A10 / Big Butt Branch & tributaries / A tributary to Knox Creek west of State Line Ridge, WQS Section 3.	5A	PCB in Fish Tissue	2006	L	6.00
VAS-Q03R_CED01A16 / Cedar Branch / Knox Creek tributary NE of Kelsa, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	2.80
VAS-Q03R_GIE01A04 / Guess Fork / Knox Creek tributary from State Line Ridge, north of Hurley, found on Panther and Hurley quad sheets in WQS Section 3.	5A	PCB in Fish Tissue	2006	L	8.70
VAS-Q03R_KOX01A00 / Knox Creek / Mainstem from Straight Fork confluence at Blackey upstream to the headwaters near Paynesville, West Virginia, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	7.75
VAS-Q03R_KOX02A98 / Knox Creek / Mainstem from Kentucky state line upstream through Hurley to the Straight Fork confluence at Blackey, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	9.53
VAS-Q03R_LBT01A10 / Long Bottom Branch / Knox Creek tributary east of Blackey in WQS Section 3.	5A	PCB in Fish Tissue	2004	L	1.41
VAS-Q03R_PPW01A94 / Pawpaw Creek / From Kentucky state line near Pawpaw downstream through Kelsa to Knox Creek confluence, along SR 643 in WQS Section 3.	5A	PCB in Fish Tissue	2004	L	4.23
VAS-Q03R_PUM01A16 / Pumpkin Branch / Guess Fork tributary, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	1.64
VAS-Q03R_RAC02A16 / Race Fork / Knox Creek tributary, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	7.04
VAS-Q03R_VDH01A05 / Unsegmented rivers in BS04 / All tributaries to Knox Creek upstream of Blackey that were included in the December 2005 Virginia Department of Health Fish Consumption ban update, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	49.72
VAS-Q03R_VDH02A05 / Unsegmented rivers in BS05 / All tributaries to Knox Creek between Blackey and Bee Branch that were included in the December 2005 Virginia Department of Health Fish Consumption ban update, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	71.55
VAS-Q03R_VDH03A05 / Unsegmented rivers in BS06 / All tributaries to Pawpaw Creek that were included in the December 2005 Virginia Department of Health Fish Consumption ban update, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	25.24

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

VAS-Q03R_VDH04A05 / Unsegmented rivers in BS07 / All tributaries to Knox Creek downstream of Pawpaw Creek that were included in the December 2005 Virginia Department of Health Fish Consumption ban update, WQS Section 3.	5A	PCB in Fish Tissue	2004	L	5.14

Knox Creek and Tributaries **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
PCB in Fish Tissue - Total Impaired Size by Water Type:			**200.75**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q03R-03-BAC** **Pawpaw Creek and Jacobs Fork**

Cause Location: This segment includes the Pawpaw Creek mainstem from the Kentucky political boundary to the confluence with Knox Creek and Jacobs Fork near the West Virginia line.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station 6AJBF010.88 had a 91% exceedance of the E.coli water quality standard. 6APPW000.03 had a 41% exceedance and 6APPW000.49 had a 50% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q03R_PPW01A94 / Pawpaw Creek / From Kentucky state line near Pawpaw downstream through Kelsa to Knox Creek confluence, along SR 643 in WQS Section 3.	5A	Escherichia coli	2010	M	4.23

Pawpaw Creek and Jacobs Fork **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**4.23**

Sources:

Rural (Residential Areas)	Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q04R-01-BAC** **Levisa Fork and Tributaries**

Cause Location: This segment includes the Levisa Fork mainstem from the headwaters downstream to the Slate Creek confluence, from the Bull Creek confluence downstream to the Kentucky state line, Slate Creek from the Upper Rockhouse Branch confluence downstream to the confluence with the Levisa Fork, the mainstem of Dismal Creek from the confluence of Hurricane Branch to the confluence with Levisa Fork and Little Prater Creek, a Levisa Fork tributary west of Tookland.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6ALEV156.82 had a 60% exceedance of the E.coli water quality standard, station 6ALEV143.80 had a 40% exceedance of the E. coli water quality standard, station 6ASAT000.26 had a 16% exceedance, station 6ALRA000.10 had a 25% exceedance and station 6ALEV131.52 had a 16% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_LEV01A94 / Levisa Fork / Mainstem from the confluence of Garden Creek, river mile 155.94 at Oakwood, to the confluence of Dismal Creek at Route 460 crossing, river mile 151.84, WQS Section 3.	4A	Escherichia coli	2010	L	3.95
VAS-Q04R_LEV01B02 / Levisa Fork / Levisa Fork downstream of Contrary Creek confluence through Keen Mountain to Garden Creek confluence, WQS Section 3.	4A	Escherichia coli	2010	L	3.94
VAS-Q06R_LEV01A98 / Levisa Fork / Mainstem from Dismal Creek confluence, river mile 151.84, downstream to Slate Creek confluence in Grundy, river mile 143.71 in WQS Section 3.	4A	Escherichia coli	2010	L	8.26
VAS-Q06R_LRA01A12 / Little Prater Creek / Levisa Fork tributary west of Tookland, Section 3.	4A	Escherichia coli	2018	L	3.23
VAS-Q07R_SAT01A00 / Slate Creek / Mainstem from the Upper Rockhouse Branch confluence near Matney downstream to the confluence with Levisa Fork in Grundy, WQS Section 3.	4A	Escherichia coli	2008	L	9.36
VAS-Q08R_LEV01A00 / Levisa Fork / From Rocklick Branch at Big Rock downstream to the Kentucky state line. VPDES permit for Buchanan County PSA/Conaway WWTP is in this segment, WQS Section 3.	4A	Escherichia coli	2006	L	2.68
VAS-Q08R_LEV02A00 / Levisa Fork / From Rocklick Branch at Big Rock upstream parallel Route 460 to Bull Creek confluence near Harman Junction, WQS Section 3.	4A	Escherichia coli	2008	L	4.72

Levisa Fork and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**36.14**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_LEV01A94 / Levisa Fork / Mainstem from the confluence of Garden Creek, river mile 155.94 at Oakwood, to the confluence of Dismal Creek at Route 460 crossing, river mile 151.84, WQS Section 3.	4A	Fecal Coliform	2004	L	3.95

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

VAS-Q04R_LEV01B02 / Levisa Fork / Levisa Fork downstream of Contrary Creek confluence through Keen Mountain to Garden Creek confluence, WQS Section 3.	4A	Fecal Coliform	2004	L	3.94
VAS-Q06R_LEV01A98 / Levisa Fork / Mainstem from Dismal Creek confluence, river mile 151.84, downstream to Slate Creek confluence in Grundy, river mile 143.71 in WQS Section 3.	4A	Fecal Coliform	2004	L	8.26
VAS-Q07R_SAT01A00 / Slate Creek / Mainstem from the Upper Rockhouse Branch confluence near Matney downstream to the confluence with Levisa Fork in Grundy, WQS Section 3.	4A	Fecal Coliform	2002	L	9.36

Levisa Fork and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			**25.51**

Sources:

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q04R-01-BEN** **Levisa Fork and Slate Creek**

Cause Location: This segment includes the Levisa Fork mainstem from the confluence of Garden Creek, river mile 155.94, downstream to the confluence of Bull Creek and from the Rocklick Branch confluence downstream to the Kentucky state line. It also includes the Slate Creek mainstem from the Upper Rockhouse Branch confluence downstream to the confluence with the Levisa Fork and Home Creek from the confluence with the Levisa Fork upstream to the Spencer Fork confluence.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The AWQM station located at 6ASAT000.05, 6ASAT004.52, 6ASAT007.71 and 6AHME002.16 were impaired based on VSCI scores. Station 6ALEV152.46 was impaired based on VSCI scores of 41 and 57 in 2007 and station 6ALEV130.29 was impaired based on VSCI scored of 38 and 54 in 2007.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_LEV01A94 / Levisa Fork / Mainstem from the confluence of Garden Creek, river mile 155.94 at Oakwood, to the confluence of Dismal Creek at Route 460 crossing, river mile 151.84, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	3.95
VAS-Q06R_LEV01A98 / Levisa Fork / Mainstem from Dismal Creek confluence, river mile 151.84, downstream to Slate Creek confluence in Grundy, river mile 143.71 in WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	8.26
VAS-Q07R_SAT01A00 / Slate Creek / Mainstem from the Upper Rockhouse Branch confluence near Matney downstream to the confluence with Levisa Fork in Grundy, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	9.36
VAS-Q08R_LEV01A00 / Levisa Fork / From Rocklick Branch at Big Rock downstream to the Kentucky state line. VPDES permit for Buchanan County PSA/Conaway WWTP is in this segment, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	2.68
VAS-Q08R_LEV03A02 / Levisa Fork / From Slate Creek confluence in Grundy downstream parallel Route 460 to Bull Creek confluence, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2006	L	6.31

Levisa Fork and Slate Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**30.56**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Non-Point Source

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q04R-01-PCB** **Levisa Fork and Garden Creek**

Cause Location: This segment begins at the Levisa Fork headwaters and continues downstream to the Kentucky state line and Garden Creek from the confluence of Right Fork Garden Creek downstream to the confluence with Levisa Fork.

City / County: Buchanan Co.

Use(s): Fish Consumption

Cause(s) / VA Category: PCB in Fish Tissue / 4A

The Fish Tissue station locate at 6AGAR000.16 found polychlorinated biphenyls (PCBs) in the sediment and station 6AGAR001.78 exceeded DEQ's screening value for PCBs. Station 6ALEV130.00 exceeded the Virginia Department of Health's (VDH) human health criteria for PCBs. PCBs were also detected a Fish Tissue station 6ALEV151.26, 6ALEV145.86, 6ALEV134.82, and 6ALEV130.00.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_GAR01A98 / Garden Creek / Garden Creek from confluence with Levisa Fork, upstream through Mavisdale to confluence of Right Fork Garden Creek near Mount Heron, WQS Section 3.	4A	PCB in Fish Tissue	2004	L	1.84
VAS-Q04R_LEV01A94 / Levisa Fork / Mainstem from the confluence of Garden Creek, river mile 155.94 at Oakwood, to the confluence of Dismal Creek at Route 460 crossing, river mile 151.84, WQS Section 3.	4A	PCB in Fish Tissue	2006	L	3.95
VAS-Q04R_LEV01B02 / Levisa Fork / Levisa Fork downstream of Contrary Creek confluence through Keen Mountain to Garden Creek confluence, WQS Section 3.	4A	PCB in Fish Tissue	2006	L	3.94
VAS-Q06R_LEV01A98 / Levisa Fork / Mainstem from Dismal Creek confluence, river mile 151.84, downstream to Slate Creek confluence in Grundy, river mile 143.71 in WQS Section 3.	4A	PCB in Fish Tissue	2006	L	8.26
VAS-Q08R_LEV01A00 / Levisa Fork / From Rocklick Branch at Big Rock downstream to the Kentucky state line. VPDES permit for Buchanan County PSA/Conaway WWTP is in this segment, WQS Section 3.	4A	PCB in Fish Tissue	2006	L	2.68
VAS-Q08R_LEV02A00 / Levisa Fork / From Rocklick Branch at Big Rock upstream parallel Route 460 to Bull Creek confluence near Harman Junction, WQS Section 3.	4A	PCB in Fish Tissue	2006	L	4.72
VAS-Q08R_LEV03A02 / Levisa Fork / From Slate Creek confluence in Grundy downstream parallel Route 460 to Bull Creek confluence, WQS Section 3.	4A	PCB in Fish Tissue	2006	L	6.31

Levisa Fork and Garden Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fish Consumption			
PCB in Fish Tissue - Total Impaired Size by Water Type:			**31.70**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q04R-02-BAC** **Garden Creek**

Cause Location: This segment includes the headwaters of Garden Creek downstream to the confluence with Levisa Fork and Right Fork Garden Creek from the headwaters downstream to the confluence with Garden Creek.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A Fecal Coliform / 4A

The AWQM station located at 6AGAR000.16 had a 18% exceedance of the E.coli water quality standard, station 6AGRF002.36 had a 46% exceedance, station 6AGAR005.25 had a 25% exceedance of the E.coli standard, station 6AGRF004.97 had a 50% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_GAR01A98 / Garden Creek / Garden Creek from confluence with Levisa Fork, upstream through Mavisdale to confluence of Right Fork Garden Creek near Mount Heron, WQS Section 3.	4A	Escherichia coli	2008	L	1.84
VAS-Q04R_GAR01B02 / Garden Creek / From headwaters of Garden Creek near Lynn Spring Gap downstream to Right Fork confluence near Mount Heron, WQS Section 3.	4A	Escherichia coli	2008	L	6.01
VAS-Q04R_GRF01A02 / Right Fork Garden Creek / Headwaters of Right Fork Garden Creek downstream to Garden Creek confluence at Mount Heron, WQS Section 3.	4A	Escherichia coli	2008	L	10.39

Garden Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**18.24**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_GAR01A98 / Garden Creek / Garden Creek from confluence with Levisa Fork, upstream through Mavisdale to confluence of Right Fork Garden Creek near Mount Heron, WQS Section 3.	4A	Fecal Coliform	2002	L	1.84

Garden Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			**1.84**

Sources:

Rural (Residential Areas)

Sanitary Sewer Overflows (Collection System Failures)

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q04R-02-BEN** **Garden Creek**

Cause Location: This segment includes the headwaters of Garden Creek downstream to the confluence with Levisa Fork and Right Fork Garden Creek from the headwaters downstream to the confluence with Garden Creek.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Total Dissolved Solids / 4A

The biological stations located at 6AGAR000.16, 6AGAR002.00, 6AGAR005.25, 6AGRF000.56 and 6AGRF004.97 were impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_GAR01A98 / Garden Creek / Garden Creek from confluence with Levisa Fork, upstream through Mavisdale to confluence of Right Fork Garden Creek near Mount Heron, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	1998	L	1.84
VAS-Q04R_GAR01B02 / Garden Creek / From headwaters of Garden Creek near Lynn Spring Gap downstream to Right Fork confluence near Mount Heron, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2008	L	6.01
VAS-Q04R_GRF01A02 / Right Fork Garden Creek / Headwaters of Right Fork Garden Creek downstream to Garden Creek confluence at Mount Heron, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2008	L	10.39

Garden Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**18.24**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q04R_GAR01B02 / Garden Creek / From headwaters of Garden Creek near Lynn Spring Gap downstream to Right Fork confluence near Mount Heron, WQS Section 3.	4A	Total Dissolved Solids	2010	L	6.01

Garden Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Total Dissolved Solids - Total Impaired Size by Water Type:			**6.01**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)	Rural (Residential Areas)	Sewage Discharges in Unsewered Areas
Source Unknown			

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q05R-00-BEN** **Dismal Creek**

Cause Location: This segment includes the headwaters of Dismal Creek near Redoak Ridge downstream through Jewell Valley and Whitewood to the Laurel Fork confluence.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological monitoring station located at 6ADIS022.34 was impaired based on VSCI scores of 48.84 and 52.93 in 2013.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q05R_DIS02A00 / Dismal Creek / Headwaters of Dismal Creek near Redoak Ridge downstream through Jewell Valley and Whitewood to Laurel Fork confluence, WQS Section 3, DGIF vi.	4A	Benthic-Macroinvertebrate Bioassessments	2016	L	9.14

Dismal Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**9.14**

Sources:

Unspecified Land Disturbance

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q05R-00-TEMP** **Dismal Creek**

Cause Location: This segment includes Dismal Creek from the confluence of Long Branch to the confluence with Levisa Fork.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5A

The AWQM station located at 6ADIS001.24 had a 16% exceedance of the temperature water quality standard for WQS Class V waters.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q05R_DIS01A00 / Dismal Creek / Dismal River from confluence of Long Branch downstream parallel SR 638 to confluence with Levisa Fork in WQS Section 3, DGIF vi.	5A	Temperature, water	2008	M	5.38

Dismal Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Temperature, water - Total Impaired Size by Water Type:			**5.38**

Sources:

Loss of Riparian Habitat	Silviculture Activities	Unspecified Land Disturbance

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q05R-01-BAC** **Dismal Creek**

Cause Location: This segment includes the mainstem of Dismal Creek from the Laurel Fork confluence downstream to the Long Branch confluence.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

AWQM station 6ADIS014.33 had an 18% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q05R_DIS01B02 / Dismal Creek / Mainstem parallel to SR 638 from Laurel Fork confluence near Whitewood downstream through Pilgrims Knob to the Long Branch confluence in WQS Section 3, DGIF vi.	4A	Escherichia coli	2010	M	12.44

Dismal Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**12.44**

Sources:

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-01-BAC** **Bull Creek, Poplar Creek, and Home Creek**

Cause Location: This segment includes the Bull Creek mainstem and tributaries, including Convict Hollow, Belcher Branch, Deel Fork, Cove Hollow. This segment also includes Poplar Creek at the confluence with Knotty Poplar Fork and continues downstream to the confluence with Levisa Fork. This segment also includes Home Creek, a tributary to the Levisa Fork.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

The AWQM station located at 6ABLC000.85 had a 25% exceedance of the E.coli water quality standard and station 6ABLC002.30 had an 84% exceedance of the E.coli water quality standard. Station 6APLR000.06 had a 25% exceedance of the E.coli standard. Station 6AHME000.42 has a 16% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_BLC01A98 / Bull Creek & tributaries / Bull Creek mainstem and tributaries, including Convict Hollow, Belcher Branch, Deel Fork, Cove Hollow in WQS Section 3.	4A	Escherichia coli	2008	M	28.45
VAS-Q08R_HME01A04 / Home Creek / Levisa Fork tributary south of Big Rock upstream to Spencer Fork confluence, WQS Section 3.	4A	Escherichia coli	2014	M	4.79
VAS-Q08R_PLR01A08 / Poplar Creek / Mainstem from Poplar Fork confluence downstream to 0.19 river mile above confluence with Levisa Fork near Harman Junction, Section 3	4A	Escherichia coli	2008	M	3.03
VAS-Q08R_PLR01A14 / Poplar Creek / Mainstem from Levisa Fork near Harman Junction upstream to first tributary at river mile 0.19.	4A	Escherichia coli	2008	M	0.19

Bull Creek, Poplar Creek, and Home Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**36.46**

Sources:

Inappropriate Waste Disposal	Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-01-BEN** **Bull Creek and Tributaries**

Cause Location: This segment includes the Bull Creek mainstem and tributaries, including Convict Hollow, Belcher Branch, Deel Fork and Cove Hollow.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological station located at 6ABLC002.30 was impaired based on the VSCI scores. Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_BLC01A98 / Bull Creek & tributaries / Bull Creek mainstem and tributaries, including Convict Hollow, Belcher Branch, Deel Fork, Cove Hollow in WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	1998	L	28.45

Bull Creek and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**28.45**

Sources:

Coal Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-02-BEN** **Home Creek**

Cause Location: This segment is a Levisa Fork tributary south of Big Rock, upstream to the Spencer Fork confluence, parallel to Route 650.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Biological monitoring station at 6AHME002.16 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_HME01A04 / Home Creek / Levisa Fork tributary south of Big Rock upstream to Spencer Fork confluence, WQS Section 3.	4A	Benthic-Macroinvertebrate Bioassessments	2010	M	4.79

Home Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.79**

Sources:

Coal Mining
Rural (Residential Areas)
Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-05-BAC** **Conaway Creek**

Cause Location: This segment is a Levisa Fork tributary at Conaway near Kentucky state line upstream to Caney Fork confluence.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 4A

AWQM station 6ACNW000.07 had a 41% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_CNW01A08 / Conaway Creek / Levisa Fork tributary at Conaway near Kentucky state line upstream to Caney Fork confluence.	4A	Escherichia coli	2016	L	2.62

Conaway Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**2.62**

Sources:

- Inappropriate Waste Disposal
- Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-05-BEN** **Conaway Creek**

Cause Location: Levisa Fork Tributary at Conaway near the Kentucky state line upstream to the Caney Fork confluence.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Biological monitoring station at 6ACNW000.07 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_CNW01A08 / Conaway Creek / Levisa Fork tributary at Conaway near Kentucky state line upstream to Caney Fork confluence.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	2.62

Conaway Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.62**

Sources:

Coal Mining Mountaintop Mining Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-06-BEN** **State Line Branch**

Cause Location: A tributary to Levisa Fork in KY north of Conaway.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_SLB01A14 / State Line Branch / Tributary to Levisa Fork in KY north of Conaway, Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	1.35

State Line Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**1.35**

Sources:

Coal Mining Mountaintop Mining Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-07-BEN** **Home Creek Headwaters**

Cause Location: This segment includes the headwaters of Home Creek.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_HME01B14 / Home Creek / Headwaters of Home Creek, Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	0.80

Home Creek Headwaters	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**0.80**

Sources:

Coal Mining Rural (Residential Areas) Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-08-BEN** **Conaway Creek and Tributaries**

Cause Location: Headwaters of Conaway Creek.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_CNW02A14 / Conaway Creek and tributaries / Headwaters of Conaway Creek, Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	6.99

Conaway Creek and Tributaries **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**6.99**

Sources:

Coal Mining Mountaintop Mining Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q08R-09-BEN** **Poplar Creek**

Cause Location: This segment includes the mainstem of Poplar Creek from the Poplar Fork confluence downstream to rivermile 0.19, above the confluence with the Levisa Fork near Harman Junction.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q08R_PLR01A08 / Poplar Creek / Mainstem from Poplar Fork confluence downstream to 0.19 river mile above confluence with Levisa Fork near Harman Junction, Section 3	5A	Benthic-Macroinvertebrate Bioassessments	2014	L	3.03

Poplar Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.03**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q09R-01-BAC** **Russell Fork**

Cause Location: This segment includes the unassessed stream segments in the headwaters of Russell Fork downstream to the confluence of the Pound River near Bartlick and from the Kentucky state line upstream 2.2 miles. Hurricane Creek from the confluence of Carver Branch downstream to the confluence with Russell Fork. It also includes Little Pawpaw Creek, a Russell Fork tributary north of Cannady and Sullivan Branch, an Indian Creek tributary from the headwaters on Long Ridge north of Duty.

City / County: Buchanan Co. Dickenson Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6ARSS047.10 had a 16% exceedance of the E.coli water quality standard, station 6ARSS041.08 had a 50% exceedance, station 6ARSS024.30 had a 13% exceedance, station 6ARSS014.15 had a 14% exceedance and Level III citizen monitoring station 6ARSS-RT722-MRRP had a 66% exceedance. Station 6AHRC000.05 had a 72% exceedance and station 6ALPP01A18 had a 15% exceedance and station 6ASLV000.05 had a 54% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q09R_HUR01A02 / Hurricane Creek / Mainstem from confluence of Carver Branch downstream to the confluence with Russell Fork at Davenport, WQS Section 4.	5A	Escherichia coli	2010	H, 2yr	0.85
VAS-Q09R_RSS01A00 / Russell Fork / Russell Fork mainstem form Hollow Poplar Creek downstream following Buchanan/ Dickenson County line to confluence of Pawpaw Creek near Cannady in WQS Section 4.	5A	Escherichia coli	2010	H, 2yr	7.46
VAS-Q09R_RSS02A00 / Russell Fork headwaters / Headwaters of Russell Fork on Big A Mountain downstream through Davenport to the confluence of Hollow Poplar Branch, WQS Section 4.	5A	Escherichia coli	2004	H, 2yr	8.87
VAS-Q09R_SLV01A08 / Sullivan Branch / Indian Creek tributary from headwaters on Long Ridge north of Duty.	5A	Escherichia coli	2018	H, 2yr	1.62
VAS-Q10R_LPP01A18 / Little Pawpaw Creek / Russell Fork tributary, north of Cannady	5A	Escherichia coli	2018	H, 2yr	2.93
VAS-Q10R_RSS01A00 / Russell Fork / Upper mainstem from confluence of Pawpaw Creek at the county line, downstream to Fryingpan Creek confluence in WQS Section 4.	5A	Escherichia coli	2010	H, 2yr	4.34
VAS-Q12R_RSS02A04 / Russell Fork / From Kentucky state line upstream 2.2 miles to protect Elkhorn City, Kentucky, raw water intake, WQS Section 4e.	5A	Escherichia coli	2006	H, 2yr	2.25
VAS-Q12R_RSS03A02 / Russell Fork / Mainstem from the Pound River confluence near Bartlick, upstream through Splashdam to the McClure River confluence in Haysi, WQS Section 4.	5A	Escherichia coli	2012	H, 2yr	3.90

Russell Fork **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**32.22**

Sources:

Rural (Residential Areas) Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q09R-01-BEN** **Indian Creek**

Cause Location: A Russell Fork tributary from the Cane Creek confluence at Duty, parallel to Route 602, downstream to the Russell Fork confluence at the Buchanan/Dickenson County line.

City / County: Buchanan Co. Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The probabilistic monitoring station located at 6AIND000.52 was impaired based on VSCI scores of 48.32 and 51.50.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q09R_IND01A10 / Indian Creek / Russell Fork tributary from Cane Creek confluence at Duty downstream to the Russell Fork confluence on Buchanan/Dickenson County line between Indian Ridge and Long Ridge, WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2012	M	2.69

Indian Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.69**

Sources:

Coal Mining Mountaintop Mining Rural (Residential Areas) Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q10R-01-BEN** **Fryingpan Creek**

Cause Location: From headwaters on Sandy Ridge near Carrie downstream to the Priest Fork confluence.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The probabilistic monitoring station 6AFRY006.70 indicates impairment based on VSCI scores of 42.64 and 36.89 in 2016.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q10R_FRY02A04 / Fryingpan Creek / From headwaters on Sandy Ridge near Carrie downstream to the Priest Fork confluence, west of Sportsman Lake in WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2012	H	9.45

Fryingpan Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**9.45**

Sources:

- Coal Mining
- Unspecified Land Disturbance

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q11R-02-BAC** **McClure River and Tributaries**

Cause Location: This segment begins at the Buffalo Creek confluence and continues downstream to the Road Branch confluence and Buffalo Creek from the headwaters downstream to the confluence with McClure River and includes Roaring Fork

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The station identified as BC on Buffalo Creek had a 50% exceedance of the E.coli water quality standard and station 6AMCR007.46 had a 16% exceedance and station 6AMCR014.69 had a 58% exceedance and station 6AROR-RF-MRRP had a 12% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q11R_BFF01A08 / Buffalo Creek / A McClure River tributary north of Nora, confluence is at Buffalo Tunnel, Section 4	5A	Escherichia coli	2008	L	3.25
VAS-Q11R_BSB01A10 / Big Spraddle Branch / A McClure River tributary, west of Stratton, WQS Section 4.	5A	Escherichia coli	2012	L	2.31
VAS-Q11R_MCR02A00 / McClure River / West of Reedy Ridge, from Caney Creek confluence north of McClure, downstream to Road Branch confluence near Steinman, WQS Section 4	5A	Escherichia coli	2006	L	9.68
VAS-Q11R_MCR03A06 / McClure River / Upstream of Caney Creek confluence at McClure through Stratton to the Buffalo Creek confluence near Buffalo Tunnel, includes the communities of McClure and Stratton, WQS Section 4.	5A	Escherichia coli	2006	L	3.38
VAS-Q11R_MCR04A06 / McClure River / From Buffalo Creek confluence north of Nora upstream to headwaters, parallels Sandy Ridge to the west, WQS Section 4.	5A	Escherichia coli	2012	L	8.70
VAS-Q11R_ROR01A14 / Roaring Fork / Tributary to McClure Creek upstream of Nora to Dark Hollow, Section 4.	5A	Escherichia coli	2014	L	1.08

McClure River and Tributaries **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**28.40**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q11R-02-BEN** **Wakenva Branch**

Cause Location: A Honey Branch tributary, west of Trammel.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q11R_WAK01A14 / Wakenva Branch / Honey Branch tributary, Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	1.80

Wakenva Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**1.80**

Sources:

Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q11R-04-BEN** **Cowan Rose Branch**

Cause Location: This segment includes Cowan Rose Branch, a tributary to Open Fork west of Carrico Ridge.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q11R_CRC01A14 / Cowan Rose Branch / Spring Fork tributary west of Carico Ridge	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	3.30

Cowan Rose Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.30**

Sources:

- Coal Mining
- Unspecified Land Disturbance

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q11R-05-BEN** **Dismal Fork**

Cause Location: This segment includes Dismal Fork, a Neece Creek tributary between Brushy Ridge and Dismal Ridge.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q11R_DIL01A14 / Dismal Fork / Neece Creek tributaries from Dismal Ridge, Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	4.51

Dismal Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.51**

Sources:

Coal Mining (Subsurface) Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q12R-01-BAC** **Russell Prater Creek**

Cause Location: This segment extends from the headwaters at Poplar Gap downstream to the confluence with Russell Fork.

City / County: Buchanan Co. Dickenson Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6ARPC000.40 had a 58% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q12R_RPC01A96 / Russell Prater Creek / Flows west from the headwaters at Poplar Gap downstream to Russell Fork confluence in Haysi, WQS Section 4.	5A	Escherichia coli	2008	L	11.72

Russell Prater Creek **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**11.72**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q12R-01-BEN** **Russell Prater Creek**

Cause Location: This segment extends from the headwaters of Russell Prater Creek downstream to the confluence with Russell Fork.

City / County: Buchanan Co. Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A Sedimentation/Siltation / 4A
Total Dissolved Solids / 4A

The biological station located at 6ARPC000.52 was impaired based on VSCI scores of 54.85 and 44.47 in 2010. 6ARPC002.45 was impaired based on VSCI scores of 33 and 46 in 2005.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q12R_RPC01A96 / Russell Prater Creek / Flows west from the headwaters at Poplar Gap downstream to Russell Fork confluence in Haysi, WQS Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	1996	L	11.72

Russell Prater Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**11.72**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q12R_RPC01A96 / Russell Prater Creek / Flows west from the headwaters at Poplar Gap downstream to Russell Fork confluence in Haysi, WQS Section 4.	4A	Sedimentation/Siltation	2010	L	11.72

Russell Prater Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Sedimentation/Siltation - Total Impaired Size by Water Type:			**11.72**

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q12R_RPC01A96 / Russell Prater Creek / Flows west from the headwaters at Poplar Gap downstream to Russell Fork confluence in Haysi, WQS Section 4.	4A	Total Dissolved Solids	2010	L	11.72

Russell Prater Creek **Aquatic Life**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Total Dissolved Solids - Total Impaired Size by Water Type:			**11.72**

Sources:

Coal Mining	Impacts from Abandoned Mine Lands (Inactive)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q12R-05-BEN** **Middle Fork (Hunts Creek)**

Cause Location: This segment is located parallel to Route 631 near Breaks.

City / County: Buchanan Co. Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q12R_XGN01A12 / Middle Fork (Hunts Creek) / A Hunts Creek tributary north of Breaks in WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2014	M	2.93

Middle Fork (Hunts Creek)	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.93**

Sources:

Loss of Riparian Habitat Silviculture Activities Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13L-01-HG** **John Flannagan Reservoir**

Cause Location: This reservoir is located Northeast of Clintwood near the Kentucky state line.

City / County: Dickenson Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

Fish tissue sampling done in 2008 found one largemouth bass that exceeded the Virginia Department of Health's level of concern and one exceeded the DEQ screening value for Mercury.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13L_PNR01A02 / John Flannagan Reservoir / This reservoir was built by USACOE to provide flood control, pollution abatement, fish and wildlife habitat, and recreational opportunities.NE of Clintwood near Kentucky state line, WQS Section 4a.	5A	Mercury in Fish Tissue	2010	L	######

John Flannagan Reservoir **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		**1,177.21**	

Sources:

Atmospheric Deposition - Toxics

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-01-BEN** **South Fork Pound River and Tributaries**

Cause Location: This segment includes the South Fork of the Pound River at the headwaters and continues downstream to the confluence with the North Fork Pound River including Phillips Creek, Hays Branch, and Glady Fork.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Biological stations located at 6APNS008.73, 6APNS004.98 and 6APNS000.40 were impaired based on VSCI scores. Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_GLD01A14 / Glady Fork / Tributaries to South Fork Pound River near Glady Fork School, Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	1.91
VAS-Q13R_HAY01A14 / Hays Branch / Tributary to South Fork Pound River south of Pound, Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	2014	L	0.86
VAS-Q13R_PNS01A02 / South Fork Pound River / From unnamed tributary parallel to SR 620 immediately upstream of Rat Creek at Dewey, downstream to the Glady Fork confluence, WQS Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	3.44
VAS-Q13R_PNS01A94 / South Fork Pound River / Mainstem from Glady Fork confluence downstream to confluence with Pound River west of Town of Pound, WQS Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	3.59
VAS-Q13R_PNS02A02 / Phillips Creek (no longer exists) / Strip Mine at 37 03 25/-82 42 20	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	1.70
VAS-Q13R_PNS02B04 / South Fork Pound River / Mainstem only from Donald Branch downstream to unnamed tributary just upstream of Rat Creek, in Wise County, WQS Section 4.	4A	Benthic-Macroinvertebrate Bioassessments	2004	L	2.21

South Fork Pound River and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**13.71**

Sources:

Mountaintop Mining Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-02-BEN** **North Fork Pound River**

Cause Location: This segment includes the mainstem from the headwaters downstream to the North Fork Pound Reservoir intake and from the backwaters of the North Fork Pound Lake downstream to the confluence with the Pound River.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

The biological station located at 6APNK000.08 was impaired based on 2006 VSCI scores of 53 and 58; most recent was 79.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNK01A96 / North Fork Pound River / Mainstem south of Horse Gap from the dam of North Fork Pound Lake, river mile 1.08, downstream to the confluence with Pound River, WQS Section 4, DGIF vi.	4A	Benthic-Macroinvertebrate Bioassessments	2002	L	1.29

North Fork Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**1.29**

Sources:

Dam or Impoundment Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-02-TEMP** **North Fork Pound River**

Cause Location: This segment extends from the PWS segment at the intake in the North Fork Pound Reservoir, upstream five miles on all tributaries.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5C

Station 6APNK000.08 had a 33% exceedance of the water quality standard for temperature.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNK01A00 / North Fork Pound River tributaries / PWS segment from raw water intake in North Fork Pound Reservoir, upstream five miles on all tributaries, WQS Section 4b.	5C	Temperature, water	2012	H	10.25

North Fork Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:			**10.25**

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-03-BAC** **Pound River**

Cause Location: This segment includes from the Georges Fork confluence upstream to the confluence with the North and South Fork Pound Rivers west of the Town of Pound and from the Georges Fork confluence downstream to the lake backwaters at Jerry Branch.

City / County: Dickenson Co. Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6APNR017.79 had a 16% exceedance, station 6APNR023.86 had a 18% exceedance and 6APNR028.76 and 30% exceedance of the E.coli water quality standard. Station 6APNR035.66 had a 18% exceedance of the E.coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNR01A00 / Pound River / Pound River flows west from the Georges Fork confluence upstream to the confluence of North Fork and South Fork Pound Rivers west of the Town of Pound, WQS Section 4.	5A	Escherichia coli	2008	H	16.94
VAS-Q13R_PNR02B02 / Pound River / From Georges Fork confluence downstream to lake backwaters near Jerry Branch, WQS Section 4.	5A	Escherichia coli	2006	H	3.22

Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			**20.16**

Sources:

Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-03-TEMP** **North Fork Pound River**

Cause Location: This segment includes the mainstem, south of Horse Gap from the dam of North Fork Pound Lake, downstream to the confluence with the Pound River.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5C

Station 6APNK000.08 had a 16% exceedance and 6APNK001.10 has 30% exceedance of the water quality standard for temperature.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNK01A96 / North Fork Pound River / Mainstem south of Horse Gap from the dam of North Fork Pound Lake, river mile 1.08, downstream to the confluence with Pound River, WQS Section 4, DGIF vi.	5C	Temperature, water	2010	L	1.29

North Fork Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:			**1.29**

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-04-BEN** **Indian Creek**

Cause Location: Pound River tributary south of the Town of Pound upstream to Barn Branch confluence.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Station 6AIAC000.42 was impaired based on VSCI scores of 34.01 and 32.55 in 2010. SOS monitoring at 6BIAC-Indian Creek-SOS in 2007 detected an unacceptable benthic community.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_IAC01A10 / Indian Creek / Lower segment, Pound River tributary that is parallel to Hwy 23, south of the Town of Pound upstream to Barn Branch confluence in WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2012	H	2.98

Indian Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**2.98**

Sources:

Coal Mining Rural (Residential Areas) Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-06-BEN** **Pound River**

Cause Location: This segment includes the Pound River from Georges Fork confluence upstream to the confluence of the North Fork and South Fork Pound Rivers.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6APNR034.58 was impaired based on VSCI scores. Station 6APNR023.86 was impaired based on VSCI scores of 51.97 and 31.98 in 2013.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNR01A00 / Pound River / Pound River flows west from the Georges Fork confluence upstream to the confluence of North Fork and South Fork Pound Rivers west of the Town of Pound, WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2004	H	16.94

Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**16.94**

Sources:

Coal Mining Rural (Residential Areas) Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-07-TEMP** **Pound River**

Cause Location: This segment includes from the Georges Fork confluence downstream to lake backwaters near Jerry Branch.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Temperature, water / 5A

6APNR017.79 had a 33% exceedance of the temperature WQS for Class VI waters.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNR02B02 / Pound River / From Georges Fork confluence downstream to lake backwaters near Jerry Branch, WQS Section 4.	5A	Temperature, water	2018	L	3.22

Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:			**3.22**

Sources:

Source Unknown

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-08-BEN** **North Fork Pound River Tributaries**

Cause Location: This segment includes the PWS segment from the raw water intake in the North Fork Powell Reservoir, upstream five miles on all tributaries, including Bad Creek, Rumley Branch and an unnamed tributary near Laurel Fork.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 4A

Biological monitoring station 6APNK000.08 was impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNK01A00 / North Fork Pound River tributaries / PWS segment from raw water intake in North Fork Pound Reservoir, upstream five miles on all tributaries, WQS Section 4b.	4A	Benthic-Macroinvertebrate Bioassessments	2010	H	10.25

North Fork Pound River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**10.25**

Sources:

Coal Mining

Silviculture Harvesting

Unspecified Land Disturbance

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-09-BAC** **Big Branch**

Cause Location: This segment includes Big Branch, a tributary to the South Fork Pound River off Route 671.

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

Citizen monitoring station 6A-BIGBR-NF-MRRP has a 33% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_BID01A14 / Big Branch / Tributary to South Fork Pound River south of North Fork Pound River Lake, Section 4.	5A	Escherichia coli	2014	M	1.46

Big Branch **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**1.46**

Sources:

Rural (Residential Areas) Unrestricted Cattle Access

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-09-BEN** **North Fork Pound River**

Cause Location: This segment includes the headwaters of the North Fork Pound River north of Flat Gap, including Bear Fork, downstream to Bad Creek confluence at Gilley.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Biological Monitoring station at 6APNK008.28 was impaired based on VSCI scores of 59.41 and 50.51 in 2013.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNK01A06 / North Fork Pound River / Headwaters of North Fork Pound River north of Flat Gap, downstream to Bad Creek confluence at Gilley, WQS Section 4b.	5A	Benthic-Macroinvertebrate Bioassessments	2010	H	4.29

North Fork Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**4.29**

Sources:

Coal Mining | Mountaintop Mining | Silviculture Activities | Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q13R-10-BAC** **South Fork Pound River**

Cause Location: This segment includes the mainstem from the Donald Branch downstream to confluence with the Pound River west of the Town of Pound.

City / County: Wise Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The citizen monitoring station located at 6APNS-RM-MRRP had a 80% exceedance of the E. coli water quality standard AWQM station 6APNS003.38 had a 25% exceedance of the E. coli water quality standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q13R_PNS01A02 / South Fork Pound River / From unnamed tributary parallel to SR 620 immediately upstream of Rat Creek at Dewey, downstream to the Glady Fork confluence, WQS Section 4.	5A	Escherichia coli	2016	L	3.44
VAS-Q13R_PNS01A94 / South Fork Pound River / Mainstem from Glady Fork confluence downstream to confluence with Pound River west of Town of Pound, WQS Section 4.	5A	Escherichia coli	2014	L	3.59
VAS-Q13R_PNS02B04 / South Fork Pound River / Mainstem only from Donald Branch downstream to unnamed tributary just upstream of Rat Creek, in Wise County, WQS Section 4.	5A	Escherichia coli	2014	L	2.21

South Fork Pound River **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**9.24**

Sources:

Rural (Residential Areas)

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q14R-01-BAC** **Cranesnest River**

Cause Location: This segment extends from the headwaters downstream to the confluence with Bartley Branch at the backwaters of the Flannagan Reservoir.

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) / VA Category: Escherichia coli / 5A

The AWQM station located at 6ACNR021.72 had a 41% exceedance, station 6ACNR011.66 had a 16% exceedance, and station 6ACNR009.17 had a 23% exceedance of the E.coli standard.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q14R_CNR01A00 / Cranesnest River / Mainstem Cranesnest River from headwaters southeast of Hurricane downstream to the Honeycamp Branch confluence, upstream of Clintwood, WQS Section 4.	5A	Escherichia coli	2010	H, 2yr	12.93
VAS-Q14R_CNR02A02 / Cranesnest River / Mainstem Cranesnest River from Honeycamp Branch downstream to the Bartley Branch confluence at the backwaters of Flannagan Reservoir in WQS Section 4.	5A	Escherichia coli	2004	H, 2yr	7.52

Cranesnest River **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**20.45**

Sources:

Rural (Residential Areas)	Sewage Discharges in Unsewered Areas

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q14R-01-BEN** **Birchfield Creek and Cranesnest River**

Cause Location: This segment includes the mainstem of the Cranesnest River from the headwaters downstream to the Honeycamp Branch confluence and Birchfield Creek from the confluence with Happy Hollow downstream to the Cranesnest River.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic stations 66ACNR017.24, 6ACNR018.89 and 6ABLD000.90 were impaired based on VSCI scores.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q14R_BLD01A10 / Birchfield Creek / A Cranesnest River tributary from confluence of Happy Hollow downstream parallel to SR 634 to Cranesnest River, south of Darwin, WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2010	H, 2yr	2.52
VAS-Q14R_CNR01A00 / Cranesnest River / Mainstem Cranesnest River from headwaters southeast of Hurricane downstream to the Honeycamp Branch confluence, upstream of Clintwood, WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2010	H, 2yr	12.93

Birchfield Creek and Cranesnest River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**15.45**

Sources:

Surface Mining

Fact Sheets for Impaired (Category 4 or 5) Waters in 2018

Tennessee and Big Sandy River Basins

***Cause Group Code:* Q14R-02-BEN** **Dotson Creek**

Cause Location: A Birchfield Creek tributary parallel to Route 636.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) / VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station at 6ADOT000.46 was impaired based on VSCI scores of 53.73 and 54.65 in 2010.

Assessment Unit / Water Name / Location Desc.	Cause Category	Cause Name	Cycle First Listed	TMDL Dev. Priority	Water Size
VAS-Q14R_DOT01A12 / Dotson Creek / A Birchfield Creek tributary from the Hurricane Branch confluence, parallel to SR 636 south of Bold Camp Mountain in WQS Section 4.	5A	Benthic-Macroinvertebrate Bioassessments	2012	H, 2yr	3.81

Dotson Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			**3.81**

Sources:

Coal Mining Surface Mining